

Annual Report on the Insurance Industry

FEDERAL INSURANCE OFFICE, U.S. DEPARTMENT OF THE TREASURY

*Completed pursuant to Title V of the Dodd-Frank Wall Street Reform
and Consumer Protection Act*

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Glossary

ABA	Activities-Based Approach
ACRSM	Advisory Committee on Risk-Sharing Mechanisms
A&H	.....	Accident and Health
ART	.....	Alternative Risk Transfer
B3i	.....	Blockchain Insurance Initiative
BEAT	.....	Base Erosion and Anti-Abuse Tax
BLS	.....	Bureau of Labor Statistics, U.S. Department of Labor
CFPB	.....	Consumer Financial Protection Bureau
Code	.....	Internal Revenue Code
ComFrame	.....	IAIS Common Framework for the Supervision of IAIGs
Core Principles	.....	Core Principles for Financial Regulation set forth in Executive Order 13772 (February 3, 2017)
Council	.....	Financial Stability Oversight Council
CRI	.....	Collateralized Reinsurance
Dodd-Frank Act	.....	Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010
DOL	.....	U.S. Department of Labor
EIOPA	.....	European Insurance and Occupational Pensions Authority
DTA	.....	Deferred Tax Assets
DTL	.....	Deferred Tax Liabilities
EO Report	.....	U.S. Department of the Treasury, <i>A Financial System That Creates Economic Opportunities: Asset Management and Insurance</i>
ERISA	.....	Employee Retirement Income Security Act of 1974
EU	.....	European Union
FACI	.....	Federal Advisory Committee on Insurance
Fannie Mae	.....	Federal National Mortgage Association
FATF	.....	Financial Action Task Force
FCA	.....	United Kingdom's Financial Conduct Authority
FCTF	.....	IAIS Financial Crime Task Force
FDIC	.....	Federal Deposit Insurance Corporation
Federal Reserve	.....	Board of Governors of the Federal Reserve System
FEMA	.....	Federal Emergency Management Agency

Fintech EO Report	.....	U.S. Department of the Treasury, <i>A Financial System that Creates Economic Opportunities: Nonbank Financials, Fintech, and Innovation</i>
FIO	.....	Federal Insurance Office
Freddie Mac	.....	Federal Home Loan Mortgage Corporation
FSB	.....	Financial Stability Board
FS-ISAC	.....	Financial Services-Information Sharing and Analysis Center
FSSCC	.....	Financial Services Sector Coordinating Council for Critical Infrastructure Protection and Homeland Security
FSTF	.....	NAIC Financial Stability Task Force
G-20	.....	Group of Twenty
GAAP	.....	Generally Accepted Accounting Principles
GAAP Plus	.....	Generally Accepted Accounting Principles with adjustments
GCC	.....	Group Capital Calculation
GCCWG	.....	NAIC Group Capital Calculation Working Group
GDPR	.....	EU General Data Protection Regulation
Ginnie Mae	.....	Government National Mortgage Association
G-SII	.....	Global Systemically Important Insurer
HHS	.....	U.S. Department of Health and Human Services
HUD	.....	U.S. Department of Housing and Urban Development
IAIG	.....	Internationally Active Insurance Group
IAIS	.....	International Association of Insurance Supervisors
iCBCM	.....	FSB Cross-Border Crisis Management Group for Insurers
ICP	.....	IAIS Insurance Core Principle
ICS	.....	IAIS Insurance Capital Standard
ILS	.....	Insurance-Linked Securities
ILW	.....	Industry Loss Warranty
IoT	.....	Internet of Things
IPPC	.....	OECD Insurance and Private Pensions Committee
IRS	.....	Internal Revenue Service
ISLHC	.....	Insurance Savings and Loan Holding Company
L&H	.....	Life and Health
LTCI	.....	Long-Term Care Insurance
M&A	.....	Mergers and Acquisitions
MAV	.....	Market-Adjusted Valuation
MBS	.....	Mortgage-Backed Securities

MitFLG	.....	Mitigation Framework Leadership Group
NAIC	.....	National Association of Insurance Commissioners
NCA	.....	National Competent Authorities
NFIP	.....	National Flood Insurance Program
NOAA	.....	National Oceanic and Atmospheric Administration
NOL	.....	Net Operating Losses
NYDFS	.....	New York Department of Financial Services
OECD	.....	Organisation for Economic Co-operation and Development
P&C	.....	Property and Casualty
RBC	.....	Risk-Based Capital
Report	.....	FIO, <i>2018 Annual Report on the Insurance Industry</i>
S&P 500	.....	Standard and Poor's 500 Index
S&P Global	.....	S&P Global Market Intelligence
SEC	.....	U.S. Securities and Exchange Commission
Secretary	.....	Secretary of the Treasury
Treasury	.....	U.S. Department of the Treasury
TRIA	.....	Terrorism Risk Insurance Act of 2002, as amended
TRIP	.....	Terrorism Risk Insurance Program
TRIP Reauthorization Act	.....	Terrorism Risk Insurance Program Reauthorization Act of 2015
U.S.-EU Covered Agreement	.....	Bilateral Agreement between the United States of America and the European Union on Prudential Measures Regarding Insurance and Reinsurance
USTR	.....	Office of the United States Trade Representative

I. INTRODUCTION

This Report is submitted by the Federal Insurance Office (FIO) of the U.S. Department of the Treasury (Treasury) pursuant to Section 502(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank Act), which requires the annual submission of a report to the President, the Committee on Financial Services of the House of Representatives, and the Committee on Banking, Housing, and Urban Affairs of the Senate “on the insurance industry and any other information as deemed relevant by the Director [of the Federal Insurance Office] or requested by such Committees.”¹

A. Structure of Report

This Report begins with an overview of FIO’s statutory responsibilities and its role, as described in the October 2017 Treasury report, *A Financial System That Creates Economic Opportunities: Asset Management and Insurance* (the EO Report).² The Report then summarizes FIO’s key activities since those described in its 2017 *Annual Report on the Insurance Industry*.³ Next, the Report provides a summary of the EO Report. Sections II through V are organized around the four key themes from the EO Report: (1) Systemic Risk and Solvency; (2) Efficient Regulation and Government Processes; (3) International Engagement; and (4) Economic Growth and Informed Choices. This Report concludes with a discussion and analysis of the insurance industry’s financial performance in calendar year 2017, its financial condition as of December 31, 2017, and the domestic insurance market outlook for 2018.

B. Federal Insurance Office

1. Insurance Regulation and the Federal Insurance Office

In the United States, the primary regulators of the business of insurance are the fifty states, the District of Columbia, and the five U.S. territories.⁴ As Treasury explained in the EO Report, the federal government also plays an important role in the insurance sector.⁵

¹ Federal Insurance Office Act of 2010, 31 U.S.C. § 313(n)(2).

² U.S. Department of Treasury, *A Financial System That Creates Economic Opportunities: Asset Management and Insurance* (2017), https://www.treasury.gov/press-center/press-releases/Documents/A-Financial-System-That-Creates-Economic-Opportunities-Asset_Management-Insurance.pdf.

³ FIO, *Annual Report on the Insurance Industry* (2017), https://www.treasury.gov/initiatives/fio/reports-and-notice/Documents/2017_FIO_Annual_Report.pdf.

⁴ State regulation of the insurance industry is coordinated through the National Association of Insurance Commissioners (NAIC), a voluntary organization whose membership consists of the chief insurance regulatory officials of the 50 states, the District of Columbia, and the five U.S. territories.

⁵ See Treasury, *EO Report*, 82-90.

Title V of the Dodd-Frank Act established FIO within Treasury.⁶ In addition to advising the Secretary on major domestic and prudential international insurance policy issues and having its Director serve as a non-voting member of the Financial Stability Oversight Council (Council), FIO is authorized to:

- monitor all aspects of the insurance industry, including identifying issues or gaps in the regulation of insurers that could contribute to a systemic crisis in the insurance industry or the U.S. financial system;
- monitor the extent to which traditionally-underserved communities and consumers, minorities, and low- and moderate-income persons have access to affordable insurance products regarding all lines of insurance, except health insurance;
- recommend to the Council that it designate an insurer, including the affiliates of such insurer, as an entity subject to regulation as a nonbank financial company supervised by the Board of Governors of the Federal Reserve System (Federal Reserve);
- assist the Secretary in the administration of the Terrorism Risk Insurance Program (TRIP), as established in Treasury under the Terrorism Risk Insurance Act of 2002, as amended (TRIA);
- coordinate federal efforts and develop federal policy on prudential aspects of international insurance matters, including representing the United States, as appropriate, in the International Association of Insurance Supervisors (IAIS) and assisting the Secretary in negotiating covered agreements;
- determine whether state insurance measures are preempted by covered agreements;
- consult with the states (including state insurance regulators) regarding insurance matters of national importance and prudential insurance matters of international importance; and
- perform such other related duties and authorities as may be assigned to FIO by the Secretary.⁷

In addition, before the Secretary may make a determination as to whether to seek the appointment of the Federal Deposit Insurance Corporation (FDIC) as receiver of an insurer under Title II of the Dodd-Frank Act, the Secretary must first receive a written recommendation from the FIO Director and the Federal Reserve.⁸ Additionally, FIO and the Federal Reserve coordinate on the performance of annual analyses of nonbank financial companies supervised by the Federal Reserve, particularly with respect to stress testing, to evaluate whether such

⁶ Federal Insurance Office Act of 2010, § 313(a). Title V also designates the Secretary of the Treasury (Secretary) as advisor to the President on “major domestic and international prudential policy issues in connection with all lines of insurance except health insurance.” § 321(a)(9).

⁷ § 313(c)(1).

⁸ Dodd-Frank Wall Street Reform and Consumer Protection Act, 12 U.S.C. § 5383(a)(1)(C).

companies have the capital, on a consolidated basis, necessary to absorb losses as a result of adverse economic conditions.⁹

The Economic Growth, Regulatory Relief, and Consumer Protection Act, signed into law on May 24, 2018, directs the Secretary of the Treasury and the Federal Reserve's Chair (or their designees) to submit an annual report to Congress on their efforts with respect to global insurance regulatory or supervisory forums.¹⁰ The Act also requires the Secretary and Chair (or their designees) to report to Congress on their efforts to increase transparency at IAIS meetings.¹¹ In addition, the Act requires that, before supporting or consenting to the adoption of any final international insurance capital standard, the Secretary, the Chair, and FIO's Director also must complete a study and submit a report to Congress on the impact of any such standard on consumers and U.S. markets.¹²

2. FIO's Five Pillars

On October 26, 2017, Treasury released the EO Report in response to Executive Order 13772, issued by President Trump on February 3, 2017, which called on Treasury to identify laws and regulations that are inconsistent with the Core Principles for Financial Regulation set forth in the Executive Order (Core Principles).¹³ The EO Report examined the regulatory framework for the U.S. asset management and insurance industries and made recommendations to ensure alignment of the regulatory framework with the Core Principles. The EO Report also included recommendations to improve the efficiency of regulation and government processes in the insurance sector.

⁹ § 5365(i)(1)(A).

¹⁰ Economic Growth, Regulatory Relief, and Consumer Protection Act, Pub. L. No. 115-174, § 211(c)(1)(a), 132 Stat. 1296 (2018).

¹¹ § 211(c)(4). The Act also establishes an Insurance Policy Advisory Committee at the Federal Reserve. *See* § 211(b).

¹² § 211(c)(3)(A). The Act further includes a Congressional finding that before taking a position on any global insurance regulatory or supervisory proposal, the Secretary, the Federal Reserve, and FIO's Director shall "achieve consensus positions with State insurance regulators through the National Association of Insurance Commissioners." § 211(a)(2). When signing the Act into law, however, the President issued a statement noting: "These directives contravene my exclusive constitutional authority to determine the time, scope, and objectives of international negotiations. My Administration will give careful and respectful consideration to the preferences expressed by the Congress in section 211(a) and will consult with State officials as appropriate, but will implement this section in a manner consistent with my constitutional authority to conduct foreign relations." President Donald J. Trump, *Statement by President Donald J. Trump on S. 2155* (May 24, 2018), <https://www.whitehouse.gov/briefings-statements/statement-president-donald-j-trump-s-2155/>.

¹³ *See* Exec. Order No. 13,772, 3 C.F.R. 586 (2018), <https://www.gpo.gov/fdsys/pkg/CFR-2018-title3-vol1/pdf/CFR-2018-title3-vol1.pdf>; Treasury, *EO Report*, 3.

The EO Report endorsed the state-based regulatory model for the U.S. insurance industry while also recognizing the importance of the federal government's role. The EO Report described how, in executing its statutory mission, FIO should be guided by five pillars:

- 1) Promote the U.S. state-based insurance regulatory system and advocate for the U.S. insurance sector in international forums and negotiations, and in foreign markets.
- 2) Provide insurance policy expertise and advice to the federal government, state insurance regulators, and industry through the publication of comprehensive research and analysis, consultation on emerging issues, and evaluation of federal insurance programs.
- 3) Provide coordinated and collaborative leadership on insurance issues that engage the federal government and state insurance regulators, including through enhanced coordination between the federal government and state insurance regulators.
- 4) Protect the U.S. financial system and economy by advising the Secretary and the Council on insurance-related matters that may pose a threat to U.S. financial stability.
- 5) Protect America's financial security by promoting access to insurance products and administering the Terrorism Risk Insurance Program.¹⁴

Treasury explained that the five pillars were established to advance the Core Principles, and stated its commitment to FIO's increased transparency and stakeholder engagement to ensure accountability to these pillars.¹⁵ The pillars, and the corresponding commitments to transparency and stakeholder engagement, have helped guide FIO's activities since release of the EO Report (including the activities described in Section I.B.3, below), and are further reflected in the contents of this Report.

3. FIO Activities

A summary of FIO activities during the period covered by this Report (some of which are further detailed later in this Report) is provided below.

In July 2017, Treasury and the Office of the U.S. Trade Representative (USTR) announced the intention of the United States to sign the Bilateral Agreement between the United States of America and the European Union on Prudential Measures Regarding Insurance and Reinsurance (U.S.-EU Covered Agreement). The United States and the European Union (EU) signed the agreement on September 22, 2017. Developments concerning the U.S.-EU Covered Agreement are discussed in Section IV.B of this Report.

FIO staff continued to participate in the quarterly meetings of the Mitigation Framework Leadership Group (MitFLG), including the meetings on July 14, 2017, January 12, 2018, April 25, 2018, and July 26, 2018. MitFLG and the National Mitigation Investment Strategy, to which FIO staff are contributing, are discussed in Section III.D of this Report.

¹⁴ Treasury, *EO Report*, 105-106.

¹⁵ Treasury, *EO Report*, 106.

On July 28, 2017, the Advisory Committee on Risk-Sharing Mechanisms (ACRSM) held a meeting on the potential involvement of the capital markets in the support of insurance for terrorism risk. The ACRSM, and the Terrorism Risk Insurance Program, also are discussed in Section III.B of this Report.¹⁶

On August 3, 2017, Treasury hosted an insurance industry cybersecurity tabletop exercise. Treasury hosted a second tabletop exercise on August 16, 2018. Insurance industry cybersecurity, and related FIO activities, are discussed in Section III.C of this Report.

The Federal Advisory Committee on Insurance (FACI), which provides advice and recommendation to FIO in performing its duties and authorities, convened on August 17, 2017, December 6, 2017, February 22, 2018, and May 10, 2018. These meetings addressed a variety of topics (some of which are discussed in further detail in this Report), including: autonomous vehicles and auto insurance; big data; blockchain; cyber risk and insurance industry exposure; cybersecurity regulation; InsurTech; and natural catastrophes and mitigation.¹⁷

FIO contributed to the EO Report, which was issued in October 2017. The EO Report made multiple recommendations concerning regulation of the U.S. insurance industry and the role and priorities of FIO. The EO Report is summarized in Section I.C below.

As part of its ongoing commitment to improve coordination with the U.S. members of the IAIS, on January 29, 2018, FIO hosted a stakeholder session on IAIS work at Treasury with representatives from the members of “Team USA”: FIO; state insurance regulators; the NAIC; and the Federal Reserve. The topics addressed included the development of an Insurance Capital Standard (ICS) and the use of an activities-based approach (ABA) for evaluating systemic risk. FIO also has continued to coordinate efforts on international insurance matters to ensure that U.S. stakeholders have regular opportunities to meet and work with all of “Team USA.”

The Treasury delegation to the March 22, 2018 U.S.-India Financial Regulatory Dialogue in Mumbai included a FIO representative. The Dialogue is an annual meeting between U.S. financial services regulators and their Indian counterparts to share information and perspectives on key regulatory issues.

On April 2, 2018, Treasury hosted a property and casualty (P&C) insurer cybersecurity roundtable, providing a forum to discuss: key cyber risks, threats, and vulnerabilities; managing cybersecurity risk; governance and priority-setting; response and recovery planning; third-party risk management; cyber insurance; and other insurance industrywide challenges.

¹⁶ More information on the ACRSM – including its meeting agenda, minutes, and presentations – is available on FIO’s website. See “Advisory Committee on Risk-Sharing Mechanisms (ACRSM),” Treasury, last updated November 2, 2017, <https://www.treasury.gov/initiatives/fio/acrsm/Pages/default.aspx>.

¹⁷ More information on FACI – including its meeting agenda, minutes, and presentations – is available on FIO’s website. See “Initiatives: Federal Advisory Committee on Insurance (FACI),” Treasury, last updated September 7, 2018, <https://www.treasury.gov/initiatives/fio/Pages/faci.aspx>.

On May 23, 2018, FIO, the Federal Emergency Management Agency (FEMA), and the National Oceanic and Atmospheric Administration (NOAA) co-hosted a financial sector stakeholder discussion, “Financing Mitigation and Promoting Resilience.” The discussions focused on: building the business case for mitigation; leveraging and incentivizing investment in mitigation; and opportunities for innovation.

On June 18, 2018, Steven J. Dreyer joined Treasury as the Director of FIO.

On June 29, 2018, FIO issued its report on the Effectiveness of the Terrorism Risk Insurance Program, as required by the TRIP Reauthorization Act.¹⁸ TRIP is discussed in Section III.B of this Report.

FIO contributed to Treasury’s July 2018 report, *A Financial System That Creates Economic Opportunities: Nonbank Financials, Fintech, and Innovation* (the Fintech EO Report).¹⁹ The Fintech EO Report identifies “improvements to the regulatory landscape that will better support nonbank financial institutions, embrace financial technology, and foster innovation.”²⁰ The Fintech EO Report, and InsurTech more generally, are discussed in Section V.D of this Report.

Throughout 2017 and 2018, FIO continued to provide expertise to other Treasury offices and other federal agencies, as discussed in Section III.A.1 of this Report. For example, FIO assisted FEMA on reinsurance and alternative risk instruments in connection with the National Flood Insurance Program (NFIP).

In addition, throughout 2017 and 2018, FIO has continued to fulfill its statutory role representing the United States in the IAIS and elsewhere on prudential international insurance measures. FIO was actively involved on IAIS work in: developing the evaluation of systemic risk and the ABA; the Common Framework for the Supervision of Internationally Active Insurance Groups (ComFrame); and developing an ICS – including its consultation paper on ICS Version 2.0 and related plans for field testing (as discussed in more detail in Section II.B of this Report). FIO also continued its involvement and leadership roles with working groups and task forces at the IAIS on a variety of issues, including resolution, financial crimes, cybersecurity, and governance, as described in more detail in Section IV.A of this Report.

Internationally, FIO also remains engaged in the Insurance and Private Pensions Committee (IPPC) at the Organisation for Economic Co-operation and Development (OECD). The OECD serves as a source of advice for the Group of Twenty (G-20) and the public on various

¹⁸ FIO, *Report on the Effectiveness of the Terrorism Risk Insurance Program* (June 2018), https://www.treasury.gov/initiatives/fio/reports-and-notice/Document/2018_TRIP_Effectiveness_Report.pdf.

¹⁹ See Treasury, *A Financial System that Creates Economic Opportunities: Nonbank Financials, Fintech, and Innovation* (July 2018), <https://home.treasury.gov/sites/default/files/2018-08/A-Financial-System-that-Creates-Economic-Opportunities---Nonbank-Financials-Fintech-and-Innovation.pdf>.

²⁰ Treasury, “Treasury Releases Report on Nonbank Financials, Fintech, and Innovation,” news release, July 31, 2018, <https://home.treasury.gov/news/press-releases/sm447>.

policymaking and implementation matters, and collects and publishes statistical data and analyses on various topics.²¹ The Department of Commerce leads the official delegation from United States to the IPPC, which also includes Treasury and representatives of state insurance regulators.

FIO also has continued its work with the EU-U.S. Insurance Project. On January 25, 2018, the EU-U.S. Insurance Project Steering Committee hosted its fifth public event in Washington, D.C. to discuss the use of big data; cyber risks and the regulator's role; and business opportunities, challenges, and emerging risks impacting the United States and Europe. The EU-U.S. Insurance Project is discussed further in Section IV.C of this Report.

C. Treasury's EO Report

On October 26, 2017, Treasury issued the EO Report in response to Executive Order 13722, which established a set of Core Principles for regulation of the U.S. financial system.²² The Core Principles under Executive Order 13722 are:

- A. Empower Americans to make independent financial decisions and informed choices in the marketplace, save for retirement, and build individual wealth;
- B. Prevent taxpayer-funded bailouts;
- C. Foster economic growth and vibrant financial markets through more rigorous regulatory impact analysis that addresses the systemic risk and market failures, such as moral hazard and information asymmetry;
- D. Enable American companies to be competitive with foreign firms in domestic and foreign markets;
- E. Advance American interests in international financial regulatory negotiations and meetings;
- F. Make regulation efficient, effective, and appropriately tailored; and
- G. Restore public accountability within federal financial regulatory agencies and rationalize the federal financial regulatory framework.

Treasury has released four reports under the Executive Order, including the EO Report. The three other reports addressed regulation of (1) banks and credit unions, (2) the capital markets, and (3) nonbank financials, Fintech, and financial innovation.²³

²¹ See OECD, *Secretary-General's Report to Ministers 2018* (2018), 16, <http://www.oecd.org/publications/secretary-general-s-report-to-ministers-22223843.htm>.

²² Treasury, *EO Report*; Exec. Order No. 13,772.

²³ See Treasury, *A Financial System That Creates Economic Opportunities: Banks and Credit Unions* (June 2017), <https://www.treasury.gov/press-center/press-releases/Documents/A%20Financial%20System.pdf>; Treasury, *A Financial System That Creates Economic Opportunities: Capital Markets* (October 2017),

The EO Report focused on the regulatory framework for the U.S. asset management and insurance industries. The EO Report, which included an overview of the life insurance and P&C industries and the regulation of those sectors, supported the primacy of state regulation and noted that the NAIC plays a central role in state insurance regulation and policy. At the same time, Treasury noted that the federal government has long had a significant impact on insurers and the business of insurance. Treasury also highlighted the roles of FIO and the Council in the federal aspects of insurance regulation, and identified 23 federal regulators and agencies involved in insurance to varying degrees.²⁴

The EO Report made detailed findings and recommendations, organized under four main themes:

- 1) the proper evaluation of systemic risk;
- 2) ensuring effective regulation and government processes;
- 3) rationalizing international engagement; and
- 4) promoting economic growth and informed choices.

The EO Report's recommendations relating to insurance are described below.

1. Systemic Risk and Solvency

The EO Report noted that states are the primary U.S. regulators of the insurance industry, and that federal insurance regulation should be coordinated with the states. The EO Report stated that entity-based systemic risk evaluations generally are not the best approach for mitigating risks arising from the insurance industry. Instead, insurance regulators should focus on potential risks arising from products and activities across the industry as a whole. At the international level, Treasury recommended that FIO and other U.S. members of the IAIS support the IAIS's work on the ABA, take steps to improve the IAIS assessment methodology for global systemically important insurers (G-SIIs), and consider how to increase transparency with respect to development of the methodology.²⁵

The EO Report made several recommendations regarding ongoing capital and liquidity initiatives conducted by the states and the NAIC, the Federal Reserve, and the IAIS. Treasury recommended harmonization of capital initiatives by the NAIC and the Federal Reserve to mitigate duplicative and unnecessary regulatory burdens for U.S. insurers, and directed FIO to consult with state insurance regulators, the NAIC, and the Federal Reserve on their respective group capital initiatives to produce the best outcomes for U.S. insurers, U.S. policyholders, and

<https://www.treasury.gov/press-center/press-releases/Documents/A-Financial-System-Capital-Markets-FINAL-FINAL.pdf>; and Treasury, *Fintech EO Report*.

²⁴ Treasury, *EO Report*, 82-90.

²⁵ Treasury, *EO Report*, 97-99.

the U.S. insurance market. Treasury also expressed its support for robust liquidity risk management programs for insurers, and encouraged the states, the NAIC, and the Federal Reserve to continue their work to address potential liquidity risk in the insurance sector. Treasury directed FIO to advocate for improvements to the existing IAIS standards regarding liquidity management and planning.²⁶

The EO Report recommended that FIO and the other U.S. members of the IAIS support the IAIS's work on the ABA. Further, Treasury noted that such an approach is more appropriate than an entity-based approach to assessing potential systemic risk in the global insurance market. Treasury also recommended that FIO and the other U.S. members of the IAIS take steps to improve the IAIS's G-SII assessment methodology and consider how to increase transparency with respect to the assessment methodology. Treasury further recommended that the U.S. members of the IAIS advocate that the IAIS enhance its work on cross-sectoral consistency with other financial sectors – such as through work with the Basel Committee on Banking Supervision – which will allow the IAIS to better assess the potential global systemic risk of insurers.²⁷

2. Efficient Regulation and Government Processes

The EO Report noted that while the business of insurance is primarily regulated at the state level, numerous federal agencies or authorities are involved in insurance with varying roles and responsibilities. In some cases, the federal government is itself a participant in the insurance sector, either as a consumer or provider of insurance. At times when the federal government is a regulator, Treasury commented that federal agencies have not always adequately considered the unique business model of insurers, leading to instances where prudential rules do not appropriately reflect the differences between banks and insurers. Treasury stated that it is important for the federal government to develop an effective and harmonized approach to engagement with the insurance sector that adequately reflects the nature and existing regulatory regime of the business.

Accordingly, Treasury recommended that federal agencies and entities establish formal mechanisms to communicate and coordinate with each other regarding insurance-related issues, and that FIO assist in this effort by establishing a more formalized and rationalized approach to its own engagement with federal agencies and entities. To promote coordination of the federal government's authority with respect to insurance, FIO should consult with and advise federal agencies and entities when they conduct rulemaking or policy action relating to insurance.²⁸

The EO Report also recognized that certain activities, products, and issues are within the scope of both federal and state regulators, and that those regulators may take positions that create tension, conflict, or duplication between state and federal requirements. The EO Report stated

²⁶ Treasury, *EO Report*, 100-104.

²⁷ Treasury, *EO Report*, 98-99.

²⁸ Treasury, *EO Report*, 128.

that, to improve efficiency, states should be consulted and afforded the opportunity to provide input when the business of insurance is addressed at the federal level. Accordingly, FIO should lead coordination efforts among the states and the federal government to improve communication and help develop policy on insurance-related issues.²⁹

In addition to the general recommendations regarding state and federal regulations, the EO Report made specific recommendations to improve the efficiency and effectiveness of regulation by several federal agencies. These recommendations included streamlining or clarifying the regulation of: insurance savings and loan holding companies by the Federal Reserve; the “business of insurance” (as defined in Title X of the Dodd-Frank Act) by the Consumer Financial Protection Bureau; and insurance products that are non-exempt securities by the Securities and Exchange Commission.³⁰ Treasury also noted that the U.S. Department of Housing and Urban Development (HUD) has expressed its intention to continue applying “disparate impact liability” under the Fair Housing Act to homeowners insurance practices that have an unjustified discriminatory effect. Treasury recommended that HUD reconsider the application to such insurance practices of its 2013 rule codifying how disparate impact cases are analyzed and consider whether this application of the rule is consistent with the McCarran-Ferguson Act of 1945 and all relevant state law.³¹

The EO Report reviewed TRIP and made recommendations concerning data calls, certifying an “act of terrorism,” and the ACRSM. Treasury directed FIO to coordinate with the states and the NAIC to attempt to eliminate or reduce inconsistencies between data calls on terrorism risk insurance conducted by Treasury and the states. Treasury also described the process for certification of an act of terrorism under an interim final rule adopted by Treasury in December 2016, and directed FIO to be proactive in applying the process in connection with any event that has a reasonable likelihood of resulting in more than \$5 million in insured losses under TRIA. Finally, Treasury encouraged the ACRSM to continue to investigate the potential for increasing private participation in the terrorism risk insurance market.³²

The EO Report found that cybersecurity and insurer data security are national policy issues that require coordination among federal and state public sector entities and partnership between the public and private sectors. Treasury recommended prompt adoption of the NAIC Insurance Data Security Model Law by the states, and further recommended Congressional action if the states do not achieve uniform data security laws within five years. Similarly, Treasury recommended that the states and the NAIC work together to expeditiously pass uniform legislation regarding data breach notification for insurers, and further recommended Congressional action if the states do not achieve uniform requirements within five years.³³

²⁹ Treasury, *EO Report*, 129.

³⁰ Treasury, *EO Report*, 106-109, 111-112.

³¹ Treasury, *EO Report*, 109-110.

³² Treasury, *EO Report*, 113-115.

³³ Treasury, *EO Report*, 117-118.

With respect to cybersecurity, the EO Report also noted Treasury's role as the federal interface for matters involving cyber threats and cybersecurity for financial institutions, including insurers, and recommended improved information sharing within the insurance industry to enhance cybersecurity. Treasury also directed FIO to establish a working group charged with assessing cybersecurity challenges for the insurance sector and issuing recommendations to insurance sector participants and relevant regulators, with particular attention paid to small and regional insurers.³⁴

In addition to recommendations directed to the federal government, the EO Report made recommendations to improve the efficiency and uniformity of state regulation with respect to product approval and speed to market, commercial insurance, and the insurance producer licensing and appointment process.³⁵

3. International Engagement

The EO Report reviewed the multilateral standard setting framework and key initiatives in international insurance regulation, focusing on the roles of the Financial Stability Board (FSB), the IAIS, and FIO. Treasury found that U.S. engagement in international financial regulatory standard-setting bodies remains important to promote financial stability, level the playing field for U.S. financial institutions, and prevent unnecessary and overly burdensome standard-setting that could stifle financial innovation. Accordingly, Treasury stated its strong belief that the FSB's activities should be limited to its purpose of monitoring and enhancing global financial stability, and that risk assessments and standards should be tailored to industry sectors and undertaken by the appropriate standard setter with the necessary technical supervisory expertise (including, for insurance-related matters, the IAIS).³⁶ With respect to the IAIS, Treasury recommended that any future changes to the organizational structure be done in a manner that ensures appropriate and geographically balanced representation and committee leadership among IAIS members. While acknowledging that the IAIS has taken steps to improve stakeholder transparency, Treasury recommended that the IAIS take additional action to further increase transparency and stakeholder input, and encouraged U.S. members of the IAIS to collectively advocate for increased transparency and collaboration during the international standard development process.³⁷ The EO Report also stated that FIO should have a permanent, voting membership on the IAIS Executive Committee.³⁸

The EO Report noted that emerging markets present significant opportunities for the U.S. insurance industry and foreign jurisdictions to develop an insurance marketplace that protects policyholders and encourages investment and expansion. Despite these opportunities, the EO

³⁴ Treasury, *EO Report*, 118.

³⁵ Treasury, *EO Report*, 120-127.

³⁶ Treasury, *EO Report*, 132.

³⁷ Treasury, *EO Report*, 133-135.

³⁸ Treasury, *EO Report*, 136.

Report further noted that certain jurisdictions have imposed measures that restrict the ability of non-domestic insurers, reinsurers, and intermediaries—including those domiciled in the United States—from competing on a level playing field. Accordingly, the Secretary directed FIO and Treasury’s Undersecretary for International Affairs to enhance engagement in multilateral and bilateral dialogues concerning the insurance sector’s international market access.³⁹

The EO Report reviewed the background of the U.S.-EU Covered Agreement, which is discussed in detail in Section IV.B of this Report, and noted that additional covered agreements may be mutually beneficial to the United States and other foreign jurisdictions. Treasury stated its belief that appropriate transparency and regular, substantive engagement with stakeholders is necessary for the proper implementation of the U.S.-EU Covered Agreement. These stakeholders include FIO, state insurance regulators, the NAIC, and others.⁴⁰

4. Economic Growth and Informed Choices

The EO Report reviewed rulemaking by the Department of Labor (DOL) concerning the definition of “fiduciary” under the Employee Retirement Income Security Act of 1974 (ERISA). In April 2016, the DOL amended its definition and adopted several related administrative exemptions from the prohibited transaction provisions in ERISA and the Internal Revenue Code (the Code) (collectively, the Fiduciary Rule). Treasury concluded that full implementation of the Fiduciary Rule should be delayed until relevant issues, including costs of compliance, could be evaluated to best serve retirement investors, and that such an evaluation should include participation by the Securities and Exchange Commission (SEC) and other financial regulators. Treasury highlighted the role of the SEC in addressing investor protection, and stated that the SEC and the DOL should work together to address standards of conduct for financial professionals in providing investment advice to retail consumers. Treasury also recommended that the SEC and the DOL engage with state insurance regulators regarding the impact of standards of care on the annuities market, noting that annuities are an important contributor to the Core Principle of empowering Americans to save for retirement.⁴¹

The EO Report noted that insurers have increasingly sought out infrastructure investments as a means of achieving higher net yields during the persistently low interest rate environment over the last decade. The EO Report further noted that current state requirements regarding the amount and type of capital insurers must hold do not reflect the special features of infrastructure investments and, in some cases, may penalize insurers to the point that such investments are not economically viable. Accordingly, Treasury recommended that state insurance regulators and the NAIC evaluate potential steps to encourage the development of more calibrated regulatory treatment of high-quality infrastructure investments.⁴²

³⁹ Treasury, *EO Report*, 137-138.

⁴⁰ Treasury, *EO Report*, 138-140.

⁴¹ Treasury, *EO Report*, 64-70.

⁴² Treasury, *EO Report*, 140-141.

The EO Report also discussed the important role played by the life insurance industry and its products in providing a secure retirement for millions of Americans, and explained that annuities in particular can be a valuable component of a retirement investment portfolio because they offer a guaranteed income stream that cannot be outlived. The EO Report noted that annuities are not widely offered in 401(k) and other defined contribution plans, and referred to employer concerns over legal liability under ERISA as the principal deterrent to offering an in-plan annuity option. To encourage the availability of in-plan annuity options and promote broader economic choice, Treasury recommended that the Departments of Labor and Treasury develop proposals on how to establish or certify an independent fiduciary to assist plan sponsors in meeting their ERISA obligations by assessing the long-term financial strength of annuity providers.⁴³

Lastly, the EO Report reviewed the ongoing decline of the private long-term care insurance (LTCI) market and observed that state insurance regulators and the NAIC are actively reviewing a range of issues and policy changes to stabilize and potentially regrow the market. The EO Report concluded that in addition to existing state efforts to address problems in the LTCI market, the challenges in financing long-term care require a coordinated response from the federal government because they are of national interest. Accordingly, Treasury stated that it would convene an inter-agency task force to develop policies to complement reforms at the state level relating to the regulation of LTCI.⁴⁴

Sections II through V of this Report are organized according to the EO Report's four themes. Each Section presents developments in domestic and international insurance policy, regulation, and markets corresponding to each theme.

⁴³ Treasury, *EO Report*, 141-143.

⁴⁴ Treasury, *EO Report*, 143-144. According to the EO Report, the task force will include representatives of the Department of Health and Human Services, Treasury, the Internal Revenue Service, and the Office of Management and Budget.

II. SYSTEMIC RISK AND SOLVENCY

Section II of this Report describes selected domestic developments – including updates on NAIC Group Capital Calculations, the NAIC Macro Prudential Initiative, and Council designations – relating to systemic risk and solvency. It then discusses international developments such as the activities-based approach for systemically-risky activities, ICS development, and liquidity management and stress testing. FIO’s other international work is discussed in Section IV of this Report.

A. Domestic Developments

1. NAIC Group Capital Calculations

In April 2016, the NAIC Executive Committee and Plenary adopted as a charge to the Financial Condition Committee that it (1) construct a group capital calculation using a Risk-Based Capital (RBC) aggregation methodology, and (2) liaise with the NAIC’s ComFrame Development and Analysis Working Group on international capital developments and consider group capital developments by the Federal Reserve to help inform its construction of a U.S. group capital calculation.⁴⁵ The Group Capital Calculation Working Group (GCCWG) was formed and charged with constructing a group capital calculation (GCC), using a RBC aggregation methodology, as an assessment tool for state regulators in providing a baseline quantitative measure for group risks.⁴⁶

Over 2017, the GCCWG considered three key issues in the construction of the GCC. First, the GCCWG discussed how to accommodate U.S. insurers that are not subject to RBC requirements and have no prescribed RBC formula. Such insurers include mortgage guaranty, financial guaranty, title, and other insurers. In these cases, the NAIC recommended that minimum capital requirements in state laws should be used, but where those requirements differ, one basis for the calculation should be chosen and applied to all insurers of that type.⁴⁷ Captive insurers would require additional consideration, with the result that the treatment of captives, in particular those that assume reserves for certain term life insurance and universal life insurance policies (often referred to as “XXX/AXXX” reserves), was discussed throughout 2017. Similarly, insurers with XXX/AXXX reserves operating under permitted or prescribed accounting practices would have

⁴⁵ See NAIC, *Spring Volume I 2016 Proceedings of the National Association of Insurance Commissioners* (April 2016), 2-21, 2-32, https://www.naic.org/prod_serv/PRC-ZS-2016_combined.pdf. The ComFrame Development and Analysis Working Group proposed this charge in October 2015. See NAIC, *NAIC Group Capital Calculation Recommendation: Adopted by the ComFrame Development and Analysis Working Group – Oct. 30, 2015, Adopted by the International Insurance Relations Committee – Nov. 19, 2015* (2015), https://www.naic.org/documents/committees_e_grp_capital_wg_related_cap_calc_reccomendation.pdf.

⁴⁶ See NAIC, *2016 Proceedings of the NAIC*, 2-21, 2-32.

⁴⁷ Memorandum from NAIC Staff to Group Capital Calculation Working Group (March 22, 2017), 2, https://www.naic.org/documents/cmte_e_grp_capital_wg_related_staff_memo_us_insurers.pdf.

to make adjustments to RBC to reflect the impact of those practices on capital.⁴⁸ These issues remain the subject of discussion.

Second, the GCCWG discussed the use of scalars for non-U.S. insurers within a group with a U.S.-based parent. Scalars would adjust local jurisdictional capital requirements to equate them to comparable U.S. levels. The NAIC recommended a “relative ratio approach” through which differences in accounting and capital requirements for life and non-life insurers within a given jurisdiction could be accommodated.⁴⁹

The third issue addressed by the GCCWG in 2017 was how to approach non-regulated entities within a group. The NAIC recommendation was to include: (1) other entities that are material to the group from a risk perspective (to be further defined by the GCCWG) to address contagion and other embedded risks; (2) any entity that could reasonably produce a to-be-defined economic loss; or (3) any entity required to be individually identified in the GCC by the lead state-/group-wide supervisor, with further discussion necessary to determine a risk assessment for these entities.⁵⁰

The work of the GCCWG continued in 2018, with the additional charge of field testing a beta version of the GCC that does not consider stress tests by the 2018 Fall National Meeting (mid-November 2018). Early in the year, the GCCWG further discussed the treatment of senior debt and surplus notes in the GCC; at issue was their potential inclusion in available capital resources. The NAIC’s recommendation was that surplus notes should be treated as available capital, while structurally subordinated senior debt should be recognized as available capital to a limited degree.⁵¹ In June 2018, the GCCWG exposed for consultation a memorandum addressing the scope of the group and revisiting the treatment of non-regulated entities.⁵²

At the Summer National meeting in August, the NAIC Group Capital Working Group considered comments submitted by stakeholders in response to its recent public exposure of plans to field test its current work. In a letter later that month to two U.S. Senators, the NAIC noted that it expects field testing to begin before the end of 2018, with finalization of its new group capital calculation no sooner than the end of 2019.⁵³

⁴⁸ Memorandum from NAIC Staff to Group Capital Calculation Working Group (March 22, 2017), 2-3.

⁴⁹ Memorandum from NAIC Staff to Group Capital Calculation Working Group (April 13, 2017), https://www.naic.org/documents/cmte_e_grp_capital_wg_related_staff_memo_scalars.pdf.

⁵⁰ Memorandum from NAIC Staff to Group Capital Calculation Working Group (October 30, 2017), 2-3, https://www.naic.org/documents/cmte_e_grp_capital_wg_related_staff_memo_nonregulated_entities.pdf.

⁵¹ Memorandum from David Altmaier, Chair, Group Capital Calculation Working Group to Group Capital Calculation Working Group (April 19, 2018), 4, https://www.naic.org/documents/cmte_e_grp_capital_wg_related_staff_memo_surplus_notes_debt.pdf.

⁵² Memorandum from NAIC Staff to Group Capital Calculation Working Group, (June 26, 2018), Attachment B, https://www.naic.org/meetings1808/cmte_e_grp_capital_wg_2018_summer_nm_materials.pdf.

⁵³ Letter from Julie Mix McPeak, NAIC President, *et al.*, to Senators Tim Scott and Mike Rounds (August 16, 2018), https://www.naic.org/documents/government_relations_181816_scott_rounds_letter.pdf.

2. NAIC Macro Prudential Initiative

In August 2017, the NAIC launched its Macro Prudential Initiative as part of the work of its Financial Stability Task Force (FSTF). The Macro Prudential Initiative's goal is to consider new or improved tools that state insurance regulators can use to:

- better monitor and respond to the impact of external financial and economic risks on insurers;
- better monitor and respond to risks from or amplified by insurers that might be transmitted externally, and which may result in significant market impacts or financial, reputational, legal, or regulatory risks for the insurer; and
- increase public awareness of NAIC/state insurance regulator monitoring capabilities regarding macroprudential trends within the United States and their implications.⁵⁴

The Macro Prudential Initiative is designed to provide greater insight into both aggregate risks across markets and specific insurers where risks may be concentrated.⁵⁵

Under the Macro Prudential Initiative, the NAIC will undertake a comprehensive review of state insurance regulators' "toolbox," assessing what existing data, metrics, and analyses are available to support macroprudential monitoring, and what enhancements or additions might be needed to serve this purpose. The first step in the process will be to improve the effectiveness and use of existing tools. Beyond that, the FSTF identified four areas for potential enhancements: liquidity; recovery and resolution; capital stress testing; and exposure concentrations.⁵⁶ This work began in late 2017, and is continuing through 2018.

The FSTF also established the Liquidity Assessment Subgroup in September 2017. The Subgroup identified a list of existing data related to liquidity risk, as well as gaps and concerns with the data. The Subgroup also exposed, for public consultation, proposals to modify NAIC financial statement reporting forms (also known as blanks) to address those data gaps and concerns.⁵⁷ For 2018, the Subgroup is also charged with developing a liquidity stress testing framework, including identification of the universe of insurers to which it would apply.⁵⁸

On the issue of recovery and resolution, the FSTF referred to the NAIC's Receivership and Insolvency Task Force a request to take several actions, including the following:

⁵⁴ NAIC, *NAIC Financial Stability Task Force Macro Prudential Initiative (MPI): A Proposed Framework* (August 1, 2017), 2, https://www.naic.org/documents/cmte_ex_financial_stability_tf_macro_prudential_initiatives.pdf.

⁵⁵ NAIC, *Proposed MPI Framework*, 2.

⁵⁶ NAIC, *Proposed MPI Framework*, 2-4.

⁵⁷ NAIC, *2017 Proceedings of the National Association of Insurance Commissioners: 2017 Fall National Meeting* (December 2-4, 2017), 4-21, https://www.naic.org/prod_serv/PRC-ZS-17-03_Combined.pdf.

⁵⁸ "Liquidity Assessment Subgroup," NAIC, https://www.naic.org/cmte_ex_lasg.htm.

- undertake an evaluation of current recovery and resolution laws, guidance, and tools to evaluate whether they incorporate best practices in those areas identified as important to financial stability;
- review what information and/or processes in recovery and resolution planning in other jurisdictions (or to groups that may be systemically important) could be most valuable for state insurance regulators to consider requiring of large, cross-border U.S. groups; and
- evaluate whether there are any current misalignments between federal and state laws that could be an obstacle to achieving effective and orderly recovery and resolutions for U.S. insurance groups.⁵⁹

3. Financial Stability Oversight Council Designations

In 2017, the Council conducted a statutorily required annual reevaluation of its July 2013 determination that American International Group, Inc. (AIG) shall be subject to Federal Reserve supervision and enhanced prudential standards.⁶⁰ In September 2017, the Council announced the rescission of its determination regarding AIG.⁶¹ In its re-evaluation, the Council noted changes that had taken place since the Council's 2013 determination, including changes that were the direct result of steps AIG had taken that reduced the potential effects of AIG's financial distress on other firms and markets. In particular, the Council cited AIG's reduction of total debt outstanding, short-term debt outstanding, derivatives use, securities lending activities, repurchase agreements, and total assets. The Council also recognized changes in AIG's corporate strategy, with the company no longer engaging in the types of activities that were the primary source of its risks prior to the financial crisis.⁶²

Following a review of the Council's processes for designating nonbank financial companies and financial market utilities, Treasury issued a report on this topic in November 2017.⁶³ The report was in response to an April 2017 Presidential Memorandum directing the Secretary to conduct a thorough review of the Council's designation processes and report to the President. The

⁵⁹ NAIC, *2017 Proceedings*, 4-22.

⁶⁰ Treasury, *Basis of the Financial Stability Oversight Council's Final Determination Regarding American International Group, Inc.* (July 8, 2013), <https://www.treasury.gov/initiatives/fsoc/designations/Documents/Basis%20of%20Final%20Determination%20Regarding%20American%20International%20Group,%20Inc.pdf>.

⁶¹ Treasury, "Financial Stability Oversight Council Announces Rescission of Nonbank Financial Company Designation," news release, September 29, 2017, <https://www.treasury.gov/press-center/press-releases/Pages/sm0169.aspx>.

⁶² Treasury, *Notice and Explanation of the Basis for the Financial Stability Oversight Council's Rescission of its Determination Regarding American International Group, Inc. (AIG)* (September 29, 2017), 5, [https://www.treasury.gov/initiatives/fsoc/designations/Documents/American International Group, Inc. \(Rescission\).pdf](https://www.treasury.gov/initiatives/fsoc/designations/Documents/American%20International%20Group,%20Inc.%20(Rescission).pdf).

⁶³ Treasury, *Financial Stability Oversight Council Designations* (November 17, 2017), <https://www.treasury.gov/press-center/press-releases/Documents/PM-FSOC-Designations-Memo-11-17.pdf>.

Presidential Memorandum also directed the Secretary to evaluate the consistency of the Council's activities related to designations with Executive Order 13772.⁶⁴

The Treasury report evaluated and provided recommendations on the Council's processes for designating nonbank financial institutions and for designating financial market utilities.⁶⁵ The review of each process was organized around three main issues: their effects and efficacy, their analytical rigor, and the Council's engagement and transparency with firms, regulators, and the public.⁶⁶

In the report, Treasury acknowledged that there are challenges in assessing systemic risk. The report recommended that the Council prioritize an activities-based or industry-wide approach to potential risks posed by nonbank financial companies.⁶⁷ Treasury also recommended that the Council increase the analytic rigor of its designation analyses, including considering the costs and benefits of designation. In addition, Treasury recommended improving the Council's engagement with companies under evaluation and their regulators, and its transparency to the public regarding designations. Treasury also recommended that the Council provide a clear "off-ramp" for designated nonbank financial companies to achieve the rescission of their designations. Treasury noted that such an "off-ramp" may incentivize designated companies to address key factors that led to the determination, and thereby help achieve the goal of reducing risks to U.S. financial stability.⁶⁸

B. International Developments

1. Activities-Based Approach

In January 2017, the IAIS Systemic Risk Assessment Task Force was created to assess and measure systemically-risky activities through an ABA, and improve cross-sectoral consistency in systemic risk measurement. Relatedly, the IAIS, jointly with the Basel Committee on Banking Supervision, created the Task Force on Systemically Important Banks and Insurers in 2017 to address inconsistencies between the assessment methodologies for Global Systemically Important Banks and G-SIIs.⁶⁹

The FSB, in consultation with the IAIS and national authorities, identified an initial list of nine G-SIIs in July 2013 using an assessment methodology developed by the IAIS, as well as the

⁶⁴ Memorandum from President Donald J. Trump to the Secretary of the Treasury (April 21, 2017), <https://www.whitehouse.gov/presidential-actions/presidential-memorandum-secretary-treasury/>.

⁶⁵ Treasury, *Financial Stability Oversight Council Designations*, 4. The content on financial market utilities is outside the scope of this Report.

⁶⁶ Treasury, *Financial Stability Oversight Council Designations*, 4.

⁶⁷ Treasury, *Financial Stability Oversight Council Designations*, 10. This recommendation is also consistent with the ongoing work on the activities-based approach at the IAIS, as discussed in Section II.B.1 of this Report.

⁶⁸ Treasury, *Financial Stability Oversight Council Designations*, 10-12.

⁶⁹ See FIO, *2017 Annual Report*, 107.

policy measures that should apply to them.⁷⁰ The FSB conducted similar annual G-SII identification processes in 2014, 2015, and 2016. In June 2016, the IAIS released an updated G-SII Assessment Methodology,⁷¹ and the FSB identified nine insurers as G-SIIs, including the same three U.S. groups (AIG, MetLife, Inc., and Prudential Financial, Inc.) that had been identified under the previous methodology. In November 2017, the FSB, in consultation with the IAIS and national authorities, decided not to publish a new list for 2017. Importantly, the FSB also welcomed and encouraged the IAIS's work to develop an ABA to systemic risk in the insurance sector and noted that, once developed, the ABA may have significant implications not only for the assessment of systemic risk, but also for the identification of G-SIIs and G-SII policy measures.⁷²

On December 8, 2017, the IAIS released its interim consultation paper on an activities-based approach to systemic risk, with a deadline for public comment by February 15, 2018.⁷³ This interim consultation paper set forth a four-step conceptual approach for the IAIS's work on developing ABA policy measures. The first step is the identification of activities that insurers engage in that could potentially threaten global financial stability in an ABA context. The second step is the evaluation of existing IAIS policy measures (such as the IAIS Insurance Core Principles (ICPs), the draft ComFrame including ICS Version 1.0, and the G-SII policy framework) that may help mitigate the potential systemic risk stemming from the identified activities. The third step involves a gap analysis that would identify risks associated with an activity that are not sufficiently mitigated by an existing policy measure. The fourth step is the development of policy measures or enhancement of existing policy measures to address any residual systemic risk. This step also involves consideration of the scope of application of the identified policy measure(s) and the use of proportionality and the consideration of cost and benefit aspects.⁷⁴

The interim consultation paper provided stakeholders an opportunity to give input into the development of the ABA and feedback on proposed steps that the IAIS will follow in its work on deriving ABA policy measures. To promote stakeholder transparency, the IAIS also held two stakeholder meetings on the ABA approach to systemic risk – the first in Nashville, Tennessee on January 13, 2018, and the second in London, England on February 1, 2018.⁷⁵

⁷⁰ FSB, *Global Systemically Important Insurers (G-SIIs) and the Policy Measures That Will Apply to Them* (July 18, 2013), http://www.fsb.org/wp-content/uploads/r_130718.pdf.

⁷¹ See IAIS, "IAIS Releases Updated G-SII Assessment Methodology," news release, June 16, 2016, <http://www.iaisweb.org/file/61170/iais-press-release-updated-g-sii-assessment-methodology>.

⁷² FSB, *Review of the List of Global Systemically Important Insurers (G-SIIs)* (November 21, 2017), <http://www.fsb.org/wp-content/uploads/P211117-2.pdf>.

⁷³ IAIS, "IAIS Releases Interim Consultation Paper on an Activities-Based Approach to Systemic Risk," news release, December 8, 2017, <https://www.iaisweb.org/page/news/press-releases/file/70446/iais-press-release-interim-public-consultation-on-an-activities-based-approach>.

⁷⁴ IAIS, *Activities-Based Approach to Systemic Risk* (December 8, 2017), 10-11, <https://www.iaisweb.org/page/consultations/closed-consultations/2018/activities-based-approach-to-systemic-risk/file/70440/interim-aba-cp-final-for-launch>.

⁷⁵ "IAIS Newsletter," IAIS, February 2018, 5, <https://www.iaisweb.org/page/news/newsletter/file/72356/iais-newsletter-february-2018>.

2. Development of an International Insurance Capital Standard for Insurance Groups

a) ICS Background

In October 2013, the IAIS announced its plan to develop a risk-based global ICS, in response to a request by the FSB to create a comprehensive, group-wide supervisory and regulatory framework for Internationally Active Insurance Groups (IAIGs). In 2014, the IAIS began to design this new regulatory framework, known as ComFrame, which would consist of both qualitative and quantitative supervisory requirements tailored to the complexity and international scope of IAIGs. As the quantitative component of ComFrame, the ICS in its final form will become a prescribed capital requirement, representing minimum capital requirements that supervisors could use to assess an insurance group's financial health.

To date, there have been two significant milestones of the ICS project. As the first milestone, the IAIS adopted ICS Version 1.0 for extended field testing in July 2017, which identified two valuation approaches—the market-adjusted valuation (MAV) and Generally Accepted Accounting Principles with adjustments (GAAP Plus). ICS Version 1.0 also established a standard method for calculating the ICS capital requirement and indicated that other methods would be considered in the calculation of the ICS capital requirement, including the use of internal models, external models, and variations of the standard method.⁷⁶

As the second milestone, in November 2017, the IAIS decided that once ICS Version 2.0 is adopted by 2019, implementation would occur in two phases—a five-year monitoring phase followed by the implementation phase. The first phase of implementation, or the monitoring period, would take effect on January 1, 2020 and continue through December 31, 2024. During this time, the ICS would not be used as a prescribed capital requirement (i.e., the ICS results would not be used as a basis for triggering supervisory action). Rather, the five-year monitoring period would be used for confidential reporting to group-wide supervisors and discussion in supervisory colleges. Confidential reporting by all IAIGs would be mandatory during this time and would involve the reporting of a reference ICS based on MAV with a single discounting approach, the standard method for calculating capital requirements, and converged criteria for qualifying capital resources. A reference ICS would provide a basis for comparison across IAIGs and with respect to GAAP Plus and internal model generated results.⁷⁷ The monitoring period would allow group-wide supervisors and host supervisors to discuss and assess the ICS as well as compare ICS results against existing group capital standards or calculations under development. Finally, additional reporting of the ICS based on GAAP Plus valuation and

⁷⁶ IAIS, *Risk-Based Global Insurance Capital Standard Version 1.0 for Extended Field Testing* (July 21, 2017), <https://www.iaisweb.org/page/supervisory-material/insurance-capital-standard/file/67651/ics-version-10-for-extended-field-testing>.

⁷⁷ The IAIS will begin discussions in later 2018 on comparability or the definition of equivalent outcomes of the reference ICS relative to ICS results generated by GAAP Plus and internal models as well as in comparison to outcomes generated by the Aggregation Method.

internal model-based capital requirement calculations would be permitted at the option of the group-wide supervisor. The second phase of implementation would be the use of the ICS as a group-wide prescribed capital requirement. The IAIS further agreed in November 2017 that it would assist in the collection and analysis of data toward the development of the Aggregation Method, a methodology that leverages the group capital calculation work that is being conducted by U.S. state regulators and the Federal Reserve.⁷⁸

While the Aggregation Method is not part of ICS Version 2.0, it is an important development in the IAIS's efforts to create a global ICS. The Aggregation Method data collection was launched on June 1, 2018, initiating the process for developing an alternative approach to the ICS standard method for determining capital resources and capital requirements.

The IAIS's ultimate goal is a single ICS that includes a common methodology through which one ICS achieves comparable, or substantially the same, outcomes across jurisdictions. ICS Version 2.0 is intended to attain an improved level of comparability in comparison to ICS Version 1.0. While ICS Version 2.0 may still include two valuation approaches, the differences between the two are expected to narrow by 2019, particularly in light of the implementation of certain accounting changes that will impact financial reporting based on either GAAP or International Financial Reporting Standards.⁷⁹

b) ICS Status

The IAIS has been undertaking a multi-year quantitative field testing process with volunteer insurance groups. Four ICS field testing exercises have been conducted between 2015 and 2018. Each quantitative ICS field testing exercise has built upon the previous year's analysis of submitted data and feedback received from volunteer groups. In 2018, 50 volunteer groups participated in the ICS field testing exercise, including eight U.S. firms.

Certain open issues significant to the operations of U.S. insurers have been included in 2018 ICS field testing and for potential resolution in ICS Version 2.0. Specifically, structural subordination has been recognized in the ICS, alongside contractual subordination, allowing the ICS framework to potentially recognize the treatment of certain financial instruments, consistent with U.S. insurance industry practices.

On July 31, 2018, the IAIS issued a third consultation document on the ICS, providing stakeholders with a final opportunity to share their views on the current structure of the ICS and to suggest any potential policy changes necessary to inform the refinement of the ICS for Version 2.0 and implementation by 2019. Together with the ICS Version 2.0 consultation

⁷⁸ "Implementation of ICS Version 2.0," IAIS, November 2, 2017, <https://www.iaisweb.org/page/supervisory-material/insurance-capital-standard/file/69796/implementation-of-ics-version-20>.

⁷⁹ IAIS, *Risk-Based Global Insurance Capital Standard Version 2.0, Public Consultation Document* (July 31, 2018), <https://www.iaisweb.org/page/supervisory-material/insurance-capital-standard/file/76133/ics-version-20-public-consultation-document>.

document, the IAIS published a separate consultation document on ComFrame for stakeholder feedback. Though ICS is part of ComFrame, it was previously agreed by the IAIS that ICS Version 2.0 would be adopted as a stand-alone document in 2019; as a result, two separate consultation documents were issued. The consultations on both ICS Version 2.0 and ComFrame will close on October 30, 2018.⁸⁰

3. IAIS Liquidity Management and Liquidity Stress Testing

In February 2017, the IAIS announced that it would develop an ABA for evaluating and mitigating systemic risk in the insurance sector, and formed the Systemic Risk Assessment Task Force (later transformed into the Systemic Risk Assessment Drafting Group) to accomplish that work.⁸¹ Previous work on systemic risk by the IAIS identified six main areas for consideration in assessing systemic risk: (1) exposure to liquidity risk; (2) macroeconomic exposure (including credit guarantees); (3) counterparty exposure; (4) substitutability; (5) global activity; and (6) size.⁸² The IAIS is using these aspects as a starting point for development of the ABA.

The IAIS noted that for insurers with comparatively longer-term liabilities and assets matched to their duration, liquidity risk is generally well contained, but nonetheless, liquidity risks could contribute to systemic risk because of specific circumstances or features.⁸³ The IAIS provided examples of such conditions. Further, the IAIS identified a number of existing IAIS policy requirements related to liquidity risk management, including enterprise risk management and Own Risk and Solvency Assessment, investment and asset-liability management, and capital adequacy requirements that could serve a macroprudential purpose in the ABA. Additionally, the IAIS noted that the ICPs and the draft ComFrame both require regular assessments of the level of risks borne by an insurer using forward-looking quantitative techniques, such as liquidity stress testing.⁸⁴ The next step in this work is to determine whether there are any necessary revisions or additions to existing policy measures, including identifying entities to which those measures would apply.

Thus far, the IAIS has identified two categories of options to address as potential policy measures: (1) quantitative, stress-based requirements; and (2) qualitative planning. Quantitative

⁸⁰ “Public Consultation on Risk-Based Global Insurance Capital Standard (ICS) Version 2.0,” *IAIS*, July 31, 2018, <https://www.iaisweb.org/page/consultations/current-consultations/ics-version-20/>; “Overall ComFrame,” *IAIS*, July 31, 2018, <https://www.iaisweb.org/page/consultations/current-consultations/overall-comframe-including-ics-version-20/>.

⁸¹ *IAIS, Activities-Based Approach to Systemic Risk* (December 8, 2017), <https://www.iaisweb.org/page/consultations/closed-consultations/2018/activities-based-approach-to-systemic-risk/file/70440/interim-aba-cp-final-for-launch>.

⁸² *IAIS, Global Systemically Important Insurers: Updated Assessment Methodology* (June 16, 2016), 14, <https://www.iaisweb.org/page/supervisory-material/financial-stability-and-macroprudential-policy-and-surveillance/file/61179/updated-g-sii-assessment-methodology-16-june-2016>.

⁸³ *IAIS, Activities-Based Approach to Systemic Risk*, 13.

⁸⁴ *IAIS, Activities-Based Approach to Systemic Risk*, 24.

liquidity requirements are viewed as unlikely in the short-term, but may be explored as a longer-term solution. On the other hand, qualitative planning requirements are seen as a possibility for the ABA policy measures to be proposed in 2019. The consideration of enhanced qualitative requirements will include liquidity risk governance, management, and reporting. Adequacy of existing data and transparency of supervisory reporting will also be considered.⁸⁵ The IAIS intends to assess interconnectedness within both quantitative and qualitative options. A consultation document to be issued in 2018 will elaborate in more detail on potential policy measures as the IAIS further develops its holistic framework for assessing and mitigating systemic risk in the insurance sector at a global level.

⁸⁵ IAIS, *Activities-Based Approach to Systemic Risk*, 28.

III. EFFICIENT REGULATION AND GOVERNMENT PROCESSES

Section III addresses FIO's efforts to advance efficient regulation and government processes through coordination on insurance matters at the state and federal levels. It also discusses certain developments at two federal agencies – HUD and the SEC. The section then turns to terrorism risk insurance, cyber insurance and cybersecurity, and concludes with a discussion of the role of insurance in mitigating natural catastrophes.

A. Role of State and Federal Regulation

1. FIO Engagement with Federal Agencies and the States

FIO continues to regularly consult with and advise multiple federal agencies and entities on insurance-related matters. For example, FIO has worked with the U.S. Department of Veterans Affairs on issues arising under the Servicemembers' Group Life Insurance Program and other life insurance programs for the benefit of servicemembers, veterans, and their families. FIO has consulted with the Department of Labor regarding the fiduciary duty of plan sponsors in selecting an annuity provider for a defined contribution plan. As another example, FIO has assisted FEMA on reinsurance and alternative risk transfer instruments in connection with the NFIP.

FIO has also sought to lead regulatory coordination between the states and the federal government with respect to insurance regulation and the development of policy on insurance-related issues. For example, FIO regularly interacts with the states and the NAIC, through direct communications with state commissioners and their staff, and through participation at NAIC meetings. In addition, FIO coordinated closely with the NAIC in 2017 and 2018 to avoid duplicative federal-state data calls, as described in Section III.B of this Report. More generally, FIO continues to invite stakeholder input on federal-state coordination and other issues through FOCI meetings, the ACSRM, and other stakeholder sessions.

2. Federal Agency Developments

Federal agencies, including HUD and the SEC, have taken steps to improve the efficiency and effectiveness of the regulation of insurance. On June 18, 2018, HUD issued an advance notice of public rulemaking to invite public comment on possible amendments to the disparate impact rule. The disparate impact rule codifies HUD's longstanding interpretation that the Fair Housing Act creates liability for practices with an unjustified discriminatory effect, even if those practices are not motivated by discriminatory intent.⁸⁶

The SEC continues to consider proposing a rule that would permit a variable annuity summary prospectus and a streamlined prospectus update, while continuing to provide appropriate

⁸⁶ Reconsideration of HUD's Implementation of the Fair Housing Act's Disparate Impact Standard, 83 Fed. Reg. 28560 (June 20, 2018), <https://www.gpo.gov/fdsys/pkg/FR-2018-06-20/pdf/2018-13340.pdf>.

disclosure to investors.⁸⁷ According to the SEC’s Spring 2018 Agency Rule List, the Division of Investment Management is considering recommending that the SEC propose “rules designed to provide variable insurance products investors with more user-friendly disclosure and to improve and streamline the delivery of information about variable insurance products through increased use of the Internet and other electronic means of delivery.”⁸⁸ Also, in its *Report on Objectives for Fiscal Year 2019*, the SEC’s Office of Investor Advocate continued to support “the development of a summary prospectus for variable annuities that would disclose the key facts that investors need to know about the risks and costs, as well as the benefits, of their investment.”⁸⁹

B. Terrorism Risk Insurance Program

The September 11, 2001 terrorist attacks resulted in an insurance industry loss of about \$44 billion (in 2016 dollars),⁹⁰ which at the time was the largest insurance industry loss in history. Following those attacks, insurers and reinsurers largely withdrew from the terrorism risk insurance market, threatening planned construction, property acquisition, business projects, and other economic activity.⁹¹ In response, TRIA was enacted,⁹² which created TRIP within Treasury.⁹³ TRIP was established primarily to incentivize the private market to offer insurance for terrorism risk, while providing a transitional period for the private market to resume pricing terrorism risk and build capacity to absorb future insurance losses.⁹⁴ Under the TRIP Reauthorization Act,⁹⁵ TRIP has been extended through December 31, 2020.

⁸⁷ On June 5, 2018, the SEC adopted Rule 30e-3, which allows mutual funds, including funds that underlie variable annuity and insurance products, to deliver required shareholder reports on the Internet. Optional Internet Availability of Investment Company Shareholder Reports, 83 Fed. Reg. 29158 (June 22, 2018), <https://www.gpo.gov/fdsys/pkg/FR-2018-06-22/pdf/2018-12423.pdf>. The EO Report recommended adoption of Rule 30e-3. Treasury, *EO Report*, 112.

⁸⁸ Enhanced Disclosure for Separate Accounts Registered as Unit Investment Trusts and Offering Variable Insurance Products (SEC) 3235-AK60 (Spring 2018), <https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=201804&RIN=3235-AK60>.

⁸⁹ SEC Office of the Investor Advocate, *Report on Objectives: Fiscal Year 2019* (June 29, 2018), 13, https://www.sec.gov/files/sec-office-investor-advocate-report-on-objectives-fy2019_0.pdf.

⁹⁰ See Charlene Chia, “Assessing Terrorism Risk 15 Years After 9/11,” *AIR*, September 8, 2016, <http://www.air-worldwide.com/Publications/AIR-Currents/2016/Assessing-Terrorism-Risk-15-Years-After-9/11/>.

⁹¹ TRIA § 101(a)(5). Because the provisions of TRIA appear in a note (15 U.S.C. § 6701 note), instead of references to sections of the United States Code, references are identified by the sections of the Act.

⁹² Terrorism Risk Insurance Act of 2002, Pub. L. No. 107-297, 116 Stat. 2322 (2002).

⁹³ For purposes of this Report, TRIP refers to the program as it is administered through current Treasury regulations. See Terrorism Risk Insurance Program, 31 C.F.R. pt. 50 (2018).

⁹⁴ TRIA § 101(b).

⁹⁵ Terrorism Risk Insurance Program Reauthorization Act, Pub. L. No. 114-1, 129 Stat. 3 (2015).

1. Data Collection and the 2018 Data Call

Under the TRIP Reauthorization Act, Treasury is required to collect terrorism risk insurance information annually from insurers in order to analyze the overall effectiveness of TRIP.⁹⁶ Beginning with the 2018 data call, Treasury coordinated with state insurance regulators and the NAIC to develop a consolidated data call (with the same information reported to Treasury as well as to state regulators), in order to reduce the burden on participating insurers.⁹⁷

FIO conducted a voluntary TRIP data call in 2016. The 2017 and 2018 data calls were mandatory, subject to a number of limited reporting exemptions for certain insurers: (1) on the basis of their small volume of TRIP-eligible lines premium writings; or (2) because they were classified as captive insurers that wrote policies in TRIP-eligible lines of insurance, but did not provide any terrorism risk insurance subject to TRIP.⁹⁸ FIO collected certain data elements through third-party workers' compensation rating bureaus to minimize the burden on reporting insurers, and used multiple reporting templates based on classification of the insurer's size and operations.⁹⁹

Through its coordination with state regulators and the NAIC, FIO has developed a consolidated data collection approach that relies in substantial part upon the data templates originally developed by Treasury, with further revisions based upon the experience from prior data collection and the input of state regulators. FIO estimates that an extremely high proportion of insurers required to participate in both the 2017 and 2018 TRIP data calls provided the requested data.¹⁰⁰

2. Terrorism Risk Insurance Program Effectiveness Report

The TRIP Reauthorization Act requires Treasury to submit to Congress a report on the effectiveness of TRIP in 2016, 2018, and 2020.¹⁰¹ The TRIP Reauthorization Act also requires Treasury to submit reports in 2017 and 2019 to Congress concerning the competitiveness of small insurers in the terrorism risk insurance marketplace.¹⁰² FIO relied upon information from the 2017 and 2018 TRIP data calls, as well as comments and information submitted by interested parties, to produce the required report on the effectiveness of TRIP, which Treasury submitted to Congress on June 29, 2018.¹⁰³

⁹⁶ TRIP Reauthorization Act § 111 (TRIA § 104(h)).

⁹⁷ Terrorism Risk Insurance Program 2018 Data Call, 82 Fed. Reg. 56328 (November 28, 2017), <https://www.gpo.gov/fdsys/pkg/FR-2017-11-28/pdf/2017-25402.pdf>.

⁹⁸ Terrorism Risk Insurance Program 2018 Data Call, 82 Fed. Reg. 56328.

⁹⁹ 2017 Data Collection Under the Terrorism Risk Insurance Program, 82 Fed. Reg. 20420 (May 1, 2017), <https://www.gpo.gov/fdsys/pkg/FR-2017-05-01/pdf/2017-08716>.

¹⁰⁰ Response rates of participating insurers in the 2017 and 2018 data calls ranged from 85 percent and 99 percent, depending on year and category of insurer. See FIO, *2018 TRIP Effectiveness Report*, 13.

¹⁰¹ TRIP Reauthorization Act § 111 (TRIA § 104(h)(2)).

¹⁰² TRIP Reauthorization Act § 112 (TRIA § 108(h)).

¹⁰³ FIO, *2018 TRIP Effectiveness Report*.

In the 2018 TRIP Effectiveness Report, FIO concluded that TRIP has been effective in making terrorism risk insurance available and affordable in the insurance marketplace. The market for terrorism risk insurance appears to be relatively stable, with few observable differences in the relevant benchmarks. Over time, there has been an increase in the amount of private reinsurance capacity for conventional terrorism risk exposure, but little or no increase in reinsurance capacity for non-conventional (i.e., nuclear, biological, chemical, or radiological) exposures. Treasury did not observe any aspects of TRIP that discouraged or impeded insurers from providing P&C insurance in general, or terrorism risk insurance specifically. In particular, TRIP remains an important feature of the market for workers' compensation insurance, given the nature of insurance that must be provided for workers' compensation as a matter of state law. Since TRIP's inception, Treasury estimated that total premiums charged by insurers for terrorism risk insurance from 2003 to 2017 were approximately \$37.6 billion (excepting amounts associated with captive insurers), which represents less than two percent of the total premiums earned in TRIP-eligible lines of insurance during that period.

3. Advisory Committee on Risk-Sharing Mechanisms

The ACRSM is a federal advisory committee established by the TRIP Reauthorization Act. It is statutorily required to provide FIO with advice, recommendations, and encouragement with respect to the creation and development of non-governmental risk-sharing mechanisms to protect against losses arising from acts of terrorism.¹⁰⁴ The ACRSM is comprised of nine members who serve as representatives of insurers, reinsurers, and capital market participants. To facilitate its exploration of the potential for increasing private participation in the terrorism risk insurance market, the ACRSM created five subcommittees (Direct Insurance, Reinsurance, Capital Markets, Exploration of Catastrophic Risks in Other Markets, and Consumer Interests).¹⁰⁵ In 2017, the Committee held three public meetings to gather information from industry participants, focusing on the direct insurance market, the insurance of catastrophic risks in other (non-terrorism) markets, and capital markets. Each session also addressed consumer interests relevant to the meeting's core topic.¹⁰⁶

The Secretary has encouraged the ACRSM, in light of the importance of TRIP, and the upcoming consideration of any further TRIP reauthorization, "to continue its efforts and develop recommendations for FIO," which "should focus on how to increase private market participation in the terrorism insurance marketplace, with the goal of providing enhanced taxpayer protection in a way that does not result in market dislocations for the consumers and providers of terrorism risk insurance."¹⁰⁷

¹⁰⁴ TRIP Reauthorization Act § 110.

¹⁰⁵ ACRSM, *Summary of Public Meeting* (March 31, 2017), 14-15, https://www.treasury.gov/initiatives/fio/acrsm/Documents/Minutes_March_2017_ACRSM.pdf.

¹⁰⁶ Meeting agenda and minutes are available through the ACRSM website. "Advisory Committee on Risk-Sharing Mechanisms (ACRSM)," Treasury, <https://www.treasury.gov/initiatives/fio/acrsm/Pages/default.aspx>, last updated November 2, 2017

¹⁰⁷ Treasury, *EO Report*, 115.

C. Cyber Insurance and Insurance Industry Cybersecurity

FIO continues to monitor developments related to the cyber insurance market and insurance industry cybersecurity.¹⁰⁸ Although cyber insurance and cybersecurity generally are treated as distinct matters, it is important to recognize the areas in which they overlap as cyber risks continue to increase.¹⁰⁹ Policyholders consider cyber insurance valuable because, in addition to risk transfer, it may offer methods for assessing their own cybersecurity, and also may provide resources to assist with mitigation before an incident and response and recovery following one. Just like their own policyholders, insurers themselves must take into account their own risks and take steps to secure their extensive underwriting and other operational data, as well as assess potential vulnerabilities from new developments such as their increasing reliance on InsurTech. (InsurTech is discussed further in Section V.D of this Report). Below, the Report provides more information on the cyber insurance market in the United States and globally, and discusses in more detail cybersecurity for the insurance industry specifically.

1. The Cyber Insurance Market

The U.S. cyber insurance market continued to grow in 2017, nearing \$1.9 billion for standalone and package policies combined, a 32 percent increase over premiums in the prior year.¹¹⁰ While take-up rates of cyber insurance can vary significantly depending on the industry and company size, overall take-up rates have been fairly consistent over the past year, according to at least one survey.¹¹¹ Another analysis, however, found that the cyber policies in force in 2017 jumped 24 percent as compared to 2016, but that take-up rates remained low among small to medium-size enterprises.¹¹²

¹⁰⁸ See FIO, *Annual Report on the Insurance Industry* (2015), 65-67, https://www.treasury.gov/initiatives/fio/reports-and-notices/Documents/2015%20FIO%20Annual%20Report_Final.pdf; FIO, *Annual Report on the Insurance Industry* (2016), 56-61, https://www.treasury.gov/initiatives/fio/reports-and-notices/Documents/2016_Annual_Report.pdf; FIO, *2017 Annual Report*, 54-62.

¹⁰⁹ The intersection between cybersecurity and the development of the cyber insurance market was underscored by a 2017 report from the OECD. See OECD, *Enhancing the Role of Insurance in Cyber Risk Management* (2017), https://read.oecd-ilibrary.org/finance-and-investment/enhancing-the-role-of-insurance-in-cyber-risk-management_9789264282148-en.

¹¹⁰ See, e.g., Calvin Trice and Jason Woleben, “Packaged Business Cybersecurity Premiums Written Soar YOY in 2017,” *S&P Global Market Intelligence*, May 11, 2018, <https://platform.mi.spglobal.com/web/client?auth=inherit#news/article?id=44537694>. See also Caroline Saucer, “Best’s Special Report Says Cyber Market Still Awaiting a Real Growth Spurt,” *Best’s News Service*, May 25, 2018, <http://www3.ambest.com/ambv/bestnews/newscontent.aspx?AltSrc=104&RefNum=208809>.

¹¹¹ The Council of Insurance Agents & Brokers, *Cyber Insurance Market Watch Survey: Executive Summary* (December 2017), <https://www.ciab.com/download/11984/ciab-december-cyber-market-watch-survey/>.

¹¹² Saucer, “Cyber Market Still Awaiting a Real Growth Spurt.”

Observers continue to predict significant future growth: one forecast, for example, estimates that the global cyber insurance market will exceed \$16 billion in premiums by 2023.¹¹³ Even those who project lower volumes agree that the rate of cyber insurance premium growth will outpace the growth rate of other types of insurance within three years.¹¹⁴ One potential driver of growth, however – the implementation of the General Data Protection Regulation (GDPR)¹¹⁵ in the EU – has not yet demonstrated the anticipated market impact.¹¹⁶

Despite recent growth, cyber insurance remains a small portion of the over \$550 billion U.S. P&C insurance market. Insurers reportedly are cautious in face of uncertainty about the risk and cost of claims. One rating agency shares these concerns, cautioning that “aggressive growth” by any insurers in this market segment could be “credit negative, as underwriting, pricing, and reserving uncertainties would outweigh the potential earnings growth benefits.”¹¹⁷ “Accumulation risk” – the risk of numerous covered losses arising from a single event – is another area of concern.¹¹⁸

Cyber insurance can help policyholders defray the cost of cyber incidents such as data breaches. One survey found, for example, that the average cost of a data breach is nearly \$4 million.¹¹⁹ Policyholders also may be attracted by the risk management services that insurers increasingly offer as part of their cyber insurance policy packages. For example, insurers may offer their clients discounts for service providers who can help with workforce training, evaluating network vulnerabilities, and reviewing incident response plans.¹²⁰

¹¹³ Prescient & Strategic Intelligence, *Cyber Insurance Market Overview* (November 2017), <https://www.psmarketresearch.com/market-analysis/cyber-insurance-market>.

¹¹⁴ “Cyber Insurance Premium Growth Will Soon Outpace All Other Sectors,” *Carrier Management*, June 8, 2018, <https://www.carriermanagement.com/news/2018/06/08/180246.htm>.

¹¹⁵ Council Regulation 2016/679 of April 26, 2016, General Data Protection Regulation, 2016 O.J. (L 119) (EU), http://ec.europa.eu/justice/data-protection/reform/files/regulation_oj_en.pdf.

¹¹⁶ Mengqi Sun, “Why Europe’s Cyber Insurance Windfall Hasn’t Happened,” *The Wall Street Journal*, June 20, 2018, <https://www.wsj.com/articles/why-europes-cyber-insurance-windfall-hasnt-happened-1529496000>. Many previously projected that GDPR would spur demand for cyber coverage in the EU. See, e.g., Sarah Veysey, “Privacy Rules May Boost Cyber Purchases,” *Business Insurance*, October 2, 2017, <https://www.businessinsurance.com/article/20171002/NEWS06/912316174/Privacy-rules-may-boost-cyber-insurance-purchases>.

¹¹⁷ Matt Macfarland, “Fitch: ‘Aggressive Growth’ in Cyber Would Be Credit Negative for Insurers,” *S&P Global Market Intelligence*, November 14, 2017, <https://platform.mi.spglobal.com/web/client?auth=inherit#news/article?id=42630952>.

¹¹⁸ See, e.g., Geneva Association, *Advancing Accumulation Risk Management in Cyber Insurance* (August 16, 2018), <https://www.genevaassociation.org/research-topics/cyber-and-innovation/advancing-accumulation-risk-management-cyber-insurance>.

¹¹⁹ The Council of Insurance Agents & Brokers, *Cyber Insurance Market Watch Survey*.

¹²⁰ See, e.g., Joe Rosengarten, “How Insurance Companies are Minimizing Cyber Losses,” *Insurance Business America*, October 3, 2017, <https://www.insurancebusinessmag.com/us/news/cyber/how-insurance-companies-are-minimizing-cyber-losses-80810.aspx>.

As the market grows, insurers, regulators, and policymakers continue to work on identifying and addressing outstanding issues related to cyber insurance. For example, key cyber insurance terms are not standardized, and both private industry and government bodies are advancing proposals to promote better understanding of common concepts.¹²¹ The FSB published for public consultation a draft Cyber Lexicon with a set of core terms related to cybersecurity and cyber resilience in the financial sector. After considering the responses to the consultation, the FSB plans to finalize the Lexicon for delivery to the G-20 in November 2018.¹²²

2. Insurance Industry Cybersecurity

Financial services organizations, including insurers, remain among the most frequent victims of reported data breaches. One report found that breaches of financial services firms tripled over the past five years.¹²³ Notably, in September 2017, Equifax publicly reported that the personal details of as many as 143 million U.S. consumers were exposed between May and July 2017.¹²⁴ With regard to the insurance industry in particular, one survey found that the average insurer was the target of 113 cyber incidents every year, and that one in three targeted incidents resulted in a security breach.¹²⁵ Insurers (and other financial services firms) are attractive targets, at least in part, because of the substantial amount of personally identifiable information in their systems. In addition, insurers writing commercial policies (such as cyber insurance products) may have access to sensitive commercial information, possibly including sensitive security information. Insurers therefore have strong incentives to put in place an appropriate cybersecurity framework.

Many insurance industry participants recognize the importance of sharing information about cybersecurity vulnerabilities and threats, as well as best practices and regulatory challenges, and therefore share cybersecurity information through a variety of formal and informal mechanisms. For example, the Financial Services-Information Sharing and Analysis Center (FS-ISAC), a member-owned non-profit organization, provides a forum for cyber and physical threat intelligence analysis and sharing for the financial sector as a whole. In addition, the FS-ISAC

¹²¹ See, e.g., European Union Agency for Network and Information Security, *Commonality of Risk Assessment Language in Cyber Insurance* (November 15, 2017), <https://www.enisa.europa.eu/publications/commonality-of-risk-assessment-language-in-cyber-insurance>.

¹²² Financial Stability Board, “FSB Publicly Consults on Cyber Lexicon,” news release, July 2, 2018, <http://www.fsb.org/2018/07/fsb-publicly-consults-on-cyber-lexicon/>.

¹²³ Phil Muncaster, “Financial Services Sector Breaches Triple in Five Years,” *Infosecurity Magazine*, February 14, 2018, <https://www.infosecurity-magazine.com/news/financial-services-breaches-triple/>.

¹²⁴ See, e.g., Noor Zainab Hussain “Equifax Data Breach to Cost Insurers \$125 Million – Property Claims Services,” *Reuters*, October 2, 2017, <https://www.reuters.com/article/legal-equifax-breach-insurance/equifax-data-breach-to-cost-insurers-125-mln-property-claim-services-idUSKCN1C7265>.

¹²⁵ Accenture, *Insuring Your Future: Cybersecurity and the Insurance Industry* (2017), <https://ins.accenture.com/rs/897-EWH-515/images/Accenture-Security-Report-2016-Key-Insights-for-Insurance-POV.pdf>.

hosts the Insurance Risk Council, an insurance-specific committee which shares information and best practices particularly relevant to insurers.¹²⁶

Regulators and policymakers at the state, federal, and international levels also are continuing to enhance the cybersecurity posture of the insurance industry. Treasury serves as the federal interface for matters involving cyber threats and cybersecurity for institutions within the domestic and international financial services sector, including insurers.¹²⁷ In this role, Treasury serves as the sector-specific agency for the financial services sector as designated by Presidential Policy Directive 21.¹²⁸ Treasury, with the Department of Homeland Security and other federal agencies, including the regulatory, law enforcement, and intelligence communities, work together to protect the nation's critical infrastructure. Treasury also coordinates with state government agencies and insurance regulators, the NAIC, and the private sector.

Treasury continues to collaborate with insurers and state regulators to help identify and adopt best practices and baseline protections to enhance cybersecurity. In August 2017, together with the Financial Services Sector Coordinating Council for Critical Infrastructure Protection and Homeland Security (FSSCC),¹²⁹ Treasury led a public-private tabletop exercise with participants from the insurance industry, state regulators and the NAIC, and the law enforcement community. A follow-up exercise, focused on third-party risk, was held in August 2018. These tabletop exercises, hosted at Treasury, simulated cyber incidents and helped identify key challenges for effective public-private response and coordination.

FIO is also forming a cybersecurity working group with Treasury's Office of Critical Infrastructure Protection and Compliance Policy and others, which intends to host a series of stakeholder discussions in the coming months to assess cybersecurity challenges for the insurance industry, particularly for small and regional insurers, and, as warranted, formulate recommendations for insurance industry participants and relevant regulators.

Insurance regulators and legislators are continuing to act at the state level. The New York Department of Financial Services (NYDFS) has implemented cybersecurity requirements for

¹²⁶ See generally "Financial Services – Information Sharing and Analysis Center," FS-ISAC, <https://www.fsisac.com/>. See also Deloitte Center for Financial Services and FS-ISAC, *The State of Cybersecurity at Financial Institutions* (2018), <https://www2.deloitte.com/content/dam/Deloitte/lu/Documents/risk/state-cybersecurity-financial-institutions.pdf>.

¹²⁷ FIO, *2017 Annual Report*, 60.

¹²⁸ The White House, Office of the Press Secretary, "Presidential Policy Directive – Critical Infrastructure Security and Resilience," news release, February 12, 2013, <https://obamawhitehouse.archives.gov/the-press-office/2013/02/12/presidential-policy-directive-critical-infrastructure-security-and-resil>.

¹²⁹ FSSCC was established by the financial sector in 2002 and works collaboratively with key government agencies to protect U.S. critical infrastructure from cyber and physical incidents. Its 70 members include financial trade associations, financial utilities, and other financial firms. "About FSSCC," FSSCC, <https://www.fsscc.org/About-FSSCC>.

financial services companies.¹³⁰ The NAIC adopted, in October 2017, the Insurance Data Security Model Law, which is designed to “establish the exclusive standards for data security and investigation and notification of a breach of data security applicable” to insurance licensees in the states which adopt the model.¹³¹ The model will become law only if a state adopts it; to date, only South Carolina has done so.¹³² Many have indicated their intent to seek changes to the Insurance Data Security Model Law as it is considered by other state legislatures, potentially undermining uniformity.¹³³

FIO is involved in international initiatives related to insurance industry cybersecurity, including through the IAIS Financial Crime Task Force (FCTF), which is chaired by a member of FIO’s staff. In August 2016, the IAIS released its *Issues Paper on Cyber Risk to the Insurance Sector*, which was developed by the FCTF.¹³⁴ More recently, the IAIS has followed up by developing an *Application Paper on Supervision of Insurer Cyber Security*. The Application Paper – which is “intended to provide further guidance to supervisors seeking to develop or enhance their approach to supervising the cyber risk, cybersecurity, and cyber resilience of insurers” – was released in draft for public comment between June 29, 2018 and August 13, 2018,¹³⁵ and is expected to be finalized and published this year.

D. Mitigation and Coordination with Other State and Federal Agencies

Severe weather events caused devastating losses in 2017. Millions of Americans were affected by Hurricanes Harvey, Irma, and Maria; wildfires which burned over nine million acres; mudslides; tornados; earthquakes; and other severe weather events.¹³⁶ In 2017 alone, 16 separate severe weather events in the United States had costs at or above \$1 billion per event. The cumulative economic costs of these billion-dollar events was over \$300 billion, a new U.S.

¹³⁰ N.Y. Comp. Codes R. & Regs. tit. 23, § 500 (2017), http://www.dfs.ny.gov/legal/regulations/adoptions/rf23-nycrr-500_cybersecurity.pdf.

¹³¹ NAIC, “NAIC Passes Insurance Data Security Model Law,” news release, October 24, 2017, https://www.naic.org/Releases/2017_docs/naic_passes_data_security_model_law.htm; Insurance Data Security Model Act, § 1 (NAIC 4th Quarter 2017), <https://www.naic.org/store/free/MDL-668.pdf>.

¹³² See, e.g., Thomas Harman, “South Carolina Becomes First State to Pass Cybersecurity Law,” *Best’s News Service*, May 14, 2018, <http://www3.ambest.com/ambv/bestnews/newscontent.aspx?AltSrc=104&RefNum=208442>.

¹³³ See, e.g., Thomas Harman, “Insurance Groups Seek Changes to NAIC Data Security Model Law When Bills Reach State Lawmakers,” *Best’s News Service*, November 1, 2017, <http://www3.ambest.com/ambv/bestnews/newscontent.aspx?AltSrc=104&RefNum=204088>.

¹³⁴ IAIS, *Issues Paper on Cyber Risk to the Insurance Sector* (August 2016), <https://www.iaisweb.org/file/61857/issues-paper-on-cyber-risk-to-the-insurance-sector>.

¹³⁵ IAIS, *Application Paper on Supervision of Insurer Cybersecurity: Public Consultation* (June 29, 2018), <https://www.iaisweb.org/page/consultations/closed-consultations/2018/application-paper-on-cyber-security>.

¹³⁶ CoreLogic, *2017 Natural Hazard Risk Summary & Analysis* (2018), <https://corelogic.maps.arcgis.com/apps/MapSeries/index.html?appid=c380cfce638441fbb6336334802792ed>.

annual record.¹³⁷ Weather-related natural catastrophes also set a new global record for losses, of which less than half were insured.¹³⁸

Insurance is a critical component for disaster recovery, providing benefits directly to policyholders when natural disasters strike. As FEMA has explained:

Experience has shown repeatedly that individuals, communities, and businesses that manage risk through insurance recover faster and more fully after a disaster.... While the [federal] Disaster Relief Fund supports survivors in the immediate aftermath of a presidentially-declared disaster, this Federal support only serves as a temporary safety net for immediate needs and does not provide for complete financial recovery. Financial preparedness, including having an insurance policy on personal and public properties, is critical to helping rebuild a home, replace belongings, and restore order to a family and community.¹³⁹ (emphasis in original)

The insurance industry also plays a significant role in supporting “mitigation,” that is, actions to reduce loss of life and property by lessening disasters’ impact.¹⁴⁰

The federal government recognizes the importance of insurance, both before and after disasters strike.¹⁴¹ FIO supports ongoing federal efforts to lessen the impact of disasters through mitigation, and to improve the availability and take-up of insurance.

Treasury, through FIO, participates in the MitFLG, a national structure to coordinate mitigation efforts across the federal government and with state, local, tribal, and territorial representatives. Among other things, MitFLG is developing a national mitigation investment strategy with voluntary recommendations designed to better communicate the need for mitigation, improve coordination of existing mitigation efforts, and increase mitigation investments nationwide.¹⁴²

¹³⁷ “Billion-Dollar Weather and Climate Disasters: Time Series,” NOAA National Centers for Environmental Information, <https://www.ncdc.noaa.gov/billions/time-series>.

¹³⁸ Munich Re, “Natural Catastrophe Review: Series of Hurricanes Makes 2017 Year of Highest Insured Losses Ever,” news release, January 4, 2018, <https://www.munichre.com/en/media-relations/publications/press-releases/2018/2018-01-04-press-release/index.html>.

¹³⁹ FEMA, *2018-2022 Strategic Plan* (March 15, 2018), 15, <https://www.fema.gov/media-library/assets/documents/160940>.

¹⁴⁰ “What is Mitigation?” FEMA, last updated June 7, 2018, <https://www.fema.gov/what-mitigation>.

¹⁴¹ See, e.g., FIO, *Report Providing an Assessment of the Current State of the Market for Natural Catastrophe Insurance in the United States* (September 2015), <https://www.treasury.gov/initiatives/fio/reports-and-notices/Documents/Natural%20Catastrophe%20Report.pdf>; FIO, *2016 Annual Report*; FIO, *Report on Protection of Insurance Consumers and Access to Insurance* (2016), https://www.treasury.gov/initiatives/fio/reports-and-notices/Documents/2016_FIO_Consumer_Report.pdf; FIO, *2017 Annual Report*.

¹⁴² See “National Mitigation Framework: National Mitigation Investment Strategy (NMIS),” FEMA, last updated May 8, 2018, <https://www.fema.gov/national-mitigation-framework>.

FEMA released a draft strategy for public comment in January 2018, underscoring the benefit of pre-disaster mitigation by noting that a National Institute of Building Sciences report found, on average, federal mitigation grants save \$6 for every \$1 spent.¹⁴³ The public comment period has closed, and MitFLG is revising the draft strategy.

FIO, FEMA, and NOAA co-hosted a financial sector stakeholder discussion in May 2018, “Financing Mitigation and Promoting Resilience.” The discussion had three objectives: (1) developing a shared understanding of the value of mitigation, and the connection to enhancing resilience; (2) increasing awareness of federal and private sector initiatives focused on leveraging and incentivizing investment in mitigation and resilience; and (3) discussing opportunities to advance partnerships that can maximize mitigation investment. The federal initiatives discussed included the MitFLG’s draft national mitigation investment strategy, as well as FEMA’s “mitigation moonshot” with the twin goals of doubling flood insurance coverage and quadrupling mitigation investments by 2023.

The NFIP, the federal insurance and risk management program managed by FEMA, continued to expand its private sector reinsurance program in 2017 and 2018. Beginning in January 2017, and following a test program in 2016, FEMA purchased reinsurance to help diversify and lessen the NFIP’s net exposure to catastrophic losses. During 2018, FEMA recovered the entire \$1.042 billion in reinsurance from its 2017 placement, for claims resulting from Hurricane Harvey.¹⁴⁴ In addition, the NFIP secured \$1.46 billion in reinsurance for qualifying flood losses in calendar year 2018.¹⁴⁵ Also in 2018, for the first time, FEMA transferred a portion of the NFIP’s financial risk to capital markets investors through a \$500 million catastrophe bond, for claims from a qualifying flood event between August 1, 2018 and July 31, 2021. FEMA worked with brokers, book runners, and a catastrophe modeler to structure this transaction.¹⁴⁶ FIO continued to provide FEMA with information and advice about reinsurance and alternative risk instruments (discussed in Section VI.B.2 of this Report).

¹⁴³ FEMA, “FEMA Releases Draft National Mitigation Investment Strategy for Public Comment,” news release, January 11, 2018, <https://www.fema.gov/news-release/2018/01/11/fema-releases-draft-national-mitigation-investment-strategy-public-comment>, (citing National Institute of Building Sciences, *Natural Hazard Mitigation Saves: 2017 Interim Report*, 1 (December 2017), https://www.fema.gov/media-library-data/1516812817859-9f866330bd6a1a93f54cdc61088f310a/MS2_2017InterimReport.pdf).

¹⁴⁴ See, e.g., “National Flood Insurance Program’s (NFIP) Reinsurance Program,” FEMA, last updated July 31, 2018, <https://www.fema.gov/nfip-reinsurance-program>. As another consequence of the 2017 hurricanes, FEMA exhausted its then-existing borrowing authority. Congress forgave \$16 billion of NFIP debt through supplemental appropriations. See Additional Supplemental Appropriations for Disaster Relief Requirements Act, 2017, Pub. L. No. 115-72, 131 Stat. 1224 (2018).

¹⁴⁵ See, e.g., “NFIP Reinsurance Program,” FEMA.

¹⁴⁶ See “National Flood Insurance Program’s (NFIP) Reinsurance Program: Summary of the August 2018 Reinsurance Placement Engaging the Capital Markets,” FEMA, last updated July 31, 2018, <https://www.fema.gov/nfip-reinsurance-program>.

The NFIP is subject to periodic reauthorization by Congress, and received several short-term extensions over the past year. The next statutory deadline for reauthorization is November 30, 2018.¹⁴⁷

¹⁴⁷ See National Flood Insurance Program Extension Act of 2018, Pub. L. No. 115-225, 132 Stat. 1624 (2018). See also “National Flood Insurance Program: Reauthorization,” FEMA, last updated August 1, 2018, <https://www.fema.gov/national-flood-insurance-program/national-flood-insurance-program-reauthorization-guidance>.

IV. INTERNATIONAL ENGAGEMENT

Section IV addresses structural changes at the IAIS, as well as other IAIS issues. It then presents the background, status, and future steps with respect to the U.S.-EU Covered Agreement, and concludes with an update on the EU-U.S. Insurance Project.

A. IAIS

1. Structural Changes at the IAIS

The IAIS is a voluntary, member-driven non-profit organization of insurance supervisors. With over 210 Members, the IAIS is the international standard-setting body responsible for developing and supporting the implementation of principles, standards, and guidance for the supervision of the insurance sector.¹⁴⁸ The IAIS is governed by the General Meeting of Members, which may: amend bylaws; adopt principles, standards, and guidance developed by the association or other persons or entities that have not already been adopted by the Executive Committee; elect Executive Committee members, and take other actions specified in the bylaws. The Executive Committee then provides strategic direction and manages the IAIS consistent with specific duties in the bylaws. It appoints the Secretary General, and makes decisions necessary to achieve the IAIS mission.¹⁴⁹

Prior to January 1, 2018, there were four committees reporting to the Executive Committee:

- Audit and Risk Committee – reviews IAIS internal controls and monitors IAIS activities to ensure achievement of objectives and compliance with procedures;
- Budget Committee – proposes an annual budget and annual member fees, and reports on the financial situation of the IAIS;
- Financial Stability and Technical Committee – responsible for developing international principles, standards, guidance, and other materials related to insurance supervision, and works on issues related to financial stability, systemic risk, and macroprudential supervision and surveillance; and
- Implementation Committee – responsible for issues related to assessments and assistance in implementing IAIS principles, standards, and guidance.¹⁵⁰

In November 2017, the General Meeting of Members approved changes to the bylaws that disbanded the Financial Stability and Technical Committee and replaced it with two new

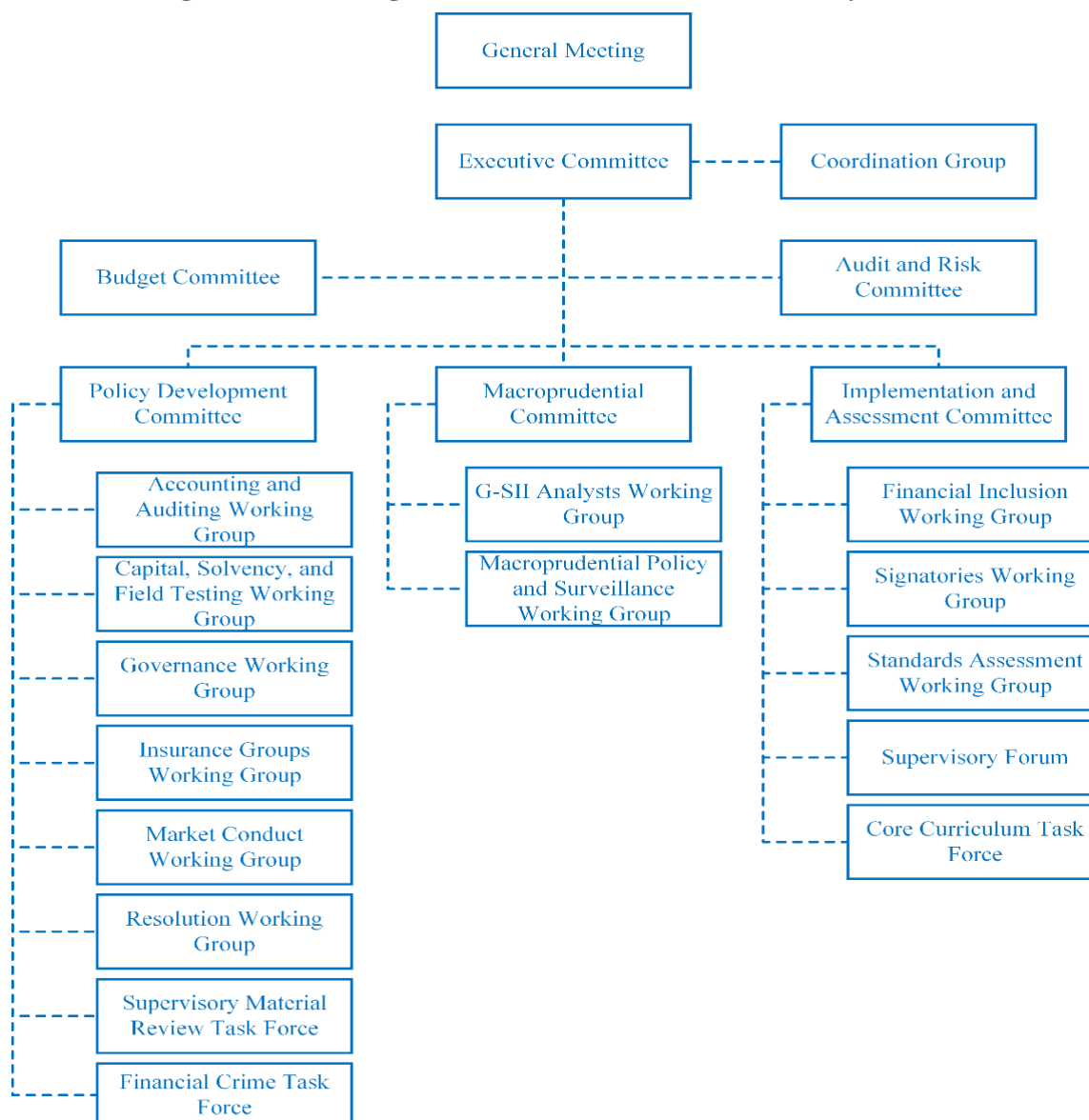
¹⁴⁸ IAIS, *2016 IAIS Annual Report* (November 2017), 6, <https://www.iaisweb.org/page/about-the-iais/annual-report/file/70097/annual-report>.

¹⁴⁹ IAIS, *2016 Annual Report*, 6.

¹⁵⁰ IAIS, *2016 Annual Report*, 6-7.

committees, effective January 1, 2018.¹⁵¹ The standard-setting activities of the Financial Stability and Technical Committee were allocated to the new Policy Development Committee, while the financial stability activities were allocated to the newly-formed Macroprudential Committee, along with those of the Systemic Risk Assessment Drafting Group (formerly the Systemic Risk Assessment Task Force).¹⁵² Also, the name of the Implementation Committee was changed to the Implementation and Assessment Committee, with no change in its charges. Figure 1 depicts the IAIS organizational structure as of January 1, 2018.

Figure 1: IAIS Organizational Structure as of January 1, 2018



Source: IAIS

¹⁵¹ IAIS, *By-Laws*, 9-10, <https://www.iaisweb.org/page/about-the-iais/by-laws>.

¹⁵² "IAIS Newsletter," *IAIS*, January 2018, 6, <https://www.iaisweb.org/page/news/newsletter/file/71696/iais-newsletter-january-2018>.

2. FIO's Role Within the IAIS

U.S. engagement in international financial regulatory standard-setting bodies, such as the IAIS, is important to promote financial stability and level the playing field for U.S. financial institutions.¹⁵³ Throughout 2017 and 2018, FIO has continued to fulfill its statutory role representing the United States in the IAIS in various IAIS committees, subcommittees, working groups, and task forces.

FIO staff have been actively engaged in the development of ICS Version 2.0 through the Capital, Solvency & Field Testing Working Group, as discussed in Section II.B of this Report. In addition, a FIO staff member chairs the IAIS Resolution Working Group, and represents the IAIS at relevant FSB bodies such as the Resolution Steering Group and the FSB Cross-Border Crisis Management Group for Insurers (iCBCM). Another member of FIO's staff chairs the IAIS Financial Crimes Task Force and, in that capacity, chairs the IAIS delegation to the Financial Action Task Force (FATF),¹⁵⁴ as well as representing the IAIS on various other international work streams including (1) the Joint Working Group on Cyber Resilience of the Committee on Payments and Marketing Infrastructure and the International Organization of Securities Commissions, and (2) the Cyber Lexicon Working Group (discussed in Sections III.C.2 and IV.D of this Report) established by the FSB in response to an October 2017 request of the G-20 Finance Ministers and Central Bank Governors. In addition, a FIO staff member chairs the Systemically Important Banks and Insurers Task Force, and is vice chair of the Systemic Risk Assessment Drafting Group (discussed in Section II.B.3 of this Report). FIO staff also participate in the IAIS's: Policy Development Committee; Coordination Group; Governance Working Group; G-SII Analysts Working Group; Insurance Groups Working Group; Macroprudential Policy & Surveillance Working Group; Strategic Plan and Financial Outlook Task Force; and Supervisory Materials Review Task Force.¹⁵⁵

To assist in the furtherance of its core mission and to promote U.S. economic interests, Treasury believes that FIO should have a permanent, voting membership on the IAIS Executive Committee.¹⁵⁶

In all of its IAIS-related (and other international) work, FIO continues to prioritize coordination and collaboration with the other U.S. members of the IAIS, as well as facilitating formal and informal opportunities for U.S. stakeholders to engage with FIO about matters before the IAIS. The U.S.-based members of the IAIS, "Team USA," include FIO, the 56 state and territory insurance regulators who represent the individual sovereign jurisdictions within the United

¹⁵³ Treasury, *EO Report*, 132.

¹⁵⁴ FATF is an inter-governmental body established in 1989 and has the objectives of setting standards and promoting effective implementation of legal, regulatory, and operational measures to combat money laundering, terrorist financing, and certain other threats. The IAIS is an Observer Organization to FATF. See "Who We Are," FATF, <http://www.fatf-gafi.org/about/>.

¹⁵⁵ See also FIO, 2017 Annual Report, 98-108; IAIS, *IAIS Committee and Subcommittee Membership List* (June 2018), <https://www.iaisweb.org/page/about-the-iais/organisational-structure/file/75208/iais-committees-and-members-public>.

¹⁵⁶ Treasury, *EO Report*, 136.

States, the NAIC, and the Federal Reserve. FIO collaborates and communicates regularly with its Team USA counterparts.

3. Insurance Core Principles/ComFrame

In 2017, the IAIS released for public consultations major revisions to the ICPs and ComFrame. The revisions, and subsequent consultations, were the next step in the thematic approach adopted by the IAIS in September 2015 aimed at ensuring a more efficient process of developing supervisory materials by theme across the three tiers of standard setting – ICPs, ComFrame, and G-SII policy measures – each of which builds on the previous one. In June 2016, the IAIS decided to restructure the ICPs and ComFrame and directly integrate ComFrame materials into the relevant ICPs. Thus, ComFrame is no longer a standalone document with material duplicative of the ICPs.¹⁵⁷

The March 2017 consultations were the first documents to reflect the new structure. This restructuring itself did not create or alter any substantive provisions within ComFrame or the ICPs, but re-oriented and re-formatted ComFrame's presentation. The restructuring, however, took place concurrently with revisions to the ICPs, which were made to reflect developments since the publication of the 2014 version. Additionally, because there were elements of ComFrame that had not been fully developed in the 2014 version, many of these elements were addressed as part of the revision process. Additional 2017 structural changes to the ICPs included the elimination of ICP 11 (Enforcement), which was integrated into ICP 10 (Preventive and Corrective Measures), and the elimination of ICP 26 (Cross-Border Cooperation and Coordination on Crisis Management) as such while moving its requirements into ICPs 12 (Winding-up and Exit from the Market) and 25 (Supervisory Cooperation and Coordination), respectively.¹⁵⁸

The IAIS conducted further consultations in 2018. Figure 2 lists the public consultations, from 2017 through July 31, 2018, related to the ICPs and ComFrame revisions, including the consultation for Overall ComFrame¹⁵⁹ and ICS Version 2.0 (discussed in Section II.B.2 of this Report).

¹⁵⁷ “Consultation: Revised Insurance Core Principles (ICPs) and ComFrame Material Integrated with ICPs (for consultation period March 3, 2017 to June 1, 2017),” IAIS, <https://www.iaisweb.org/page/consultations/closed-consultations/2017/revision-of-icps-and-comframe>.

¹⁵⁸ “Consultation: Revised ICPs and ComFrame Material Integrated with ICPs (for consultation period March 3, 2017 to June 1, 2017),” IAIS.

¹⁵⁹ IAIS, *Cover Note for Draft Overall ComFrame Released for Public Consultation on 31 July 2018* (July 31, 2018), <https://www.iaisweb.org/page/consultations/current-consultations/overall-comframe-including-ics-version-20/file/76106/cover-note-on-draft-overall-comframe>.

Figure 2: 2017 and 2018 Public Consultations Related to ICP and ComFrame Revisions

	ICP	ComFrame
Introduction and Assessment Methodology	2017	2017
ICP 1 (Objectives, Powers, and Responsibilities of the Supervisor)	2017	
ICP 2 (Supervisor)	2017	
ICP 3 (Information Sharing and Confidentiality Requirements)	2017	
ICP 5 (Suitability of Persons)		2017
ICP 6 (Changes in Control and Portfolio Transfers)	2018	
ICP 7 (Corporate Governance)		2017
ICP 8 (Risk Management and Internal Controls)	2018	2017
ICP 9 (Supervisory Review and Reporting)	2017	2017
ICP 10 (Preventative and Corrective Measures)	2017	2017
ICP 11 (Enforcement) (<i>incorporated into ICP 10</i>)	2017	2017
ICP 12 (Exit from the Market and Resolution)	2017	2017
ICP 13 (Reinsurance and Other Forms of Risk Transfer)	2017	
ICP 15 (Investments)	2018	2018
ICP 16 (Enterprise Risk Management for Solvency Purposes)	2018	2018
ICP 18 (Intermediaries)	2017	
ICP 20 (Public Disclosures)	2018	
ICP 19 (Conduct of Business)	2017	
ICP 24 (Macroprudential Surveillance and Insurance Supervision)	2017	
ICP 25 (Supervisory Cooperation and Coordination)	2017	2017
ICP 26 (Cross-Border Cooperation and Coordination on Crisis Management) (<i>eliminated and incorporated into other ICPs</i>)	2017	2017
Proposed definitions of Enterprise Risk Management-related terms	2018	2018
Overall ComFrame		2018
Revised ICS Version 2.0		2018

Source: FIO

The IAIS currently intends to adopt the revised ICPs and ComFrame (including ICS Version 2.0) in late 2019. In February 2017, however, the IAIS announced that it will develop an activities-based approach to assessing systemic risk in the insurance sector, and adopted a work plan involving a public consultation at the end of 2018, and including the finalization of any policy measures to address potential systemically risky activities as part of the ICPs and ComFrame (including ICS Version 2.0) to be adopted in 2019.¹⁶⁰ This work may have implications for the existing ICPs and ComFrame.

¹⁶⁰ “Revision of ICPs 1, 2, 18, and 19 (public consultation from June 30, 2017 to August 29, 2017),” IAIS, <https://www.iaisweb.org/page/consultations/closed-consultations/2017/revision-of-icps-12-18-19-and-24>.

B. U.S.-EU Covered Agreement

1. Background; Benefits; and Transparency

a) Introduction

In September 2017, the Secretary and the United States Trade Representative, together with EU officials, signed the *Bilateral Agreement between the United States of America and the European Union on Prudential Measures Regarding Insurance and Reinsurance*, generally known in the United States as the U.S.-EU Covered Agreement.¹⁶¹ This step was preceded by a multi-year project convened by FIO to increase mutual understanding and enhance cooperation between the EU and the United States regarding insurance supervision;¹⁶² approximately a year of international negotiations in 2016; and several months of stakeholder consultation and completion of certain administrative steps in 2017.

A covered agreement is an international bilateral or multilateral agreement on insurance or reinsurance that “relates to the recognition of prudential measures” and that “achieves a level of protection for insurance or reinsurance consumers that is substantially equivalent to the level of protection achieved” under U.S. state-based regulation.¹⁶³ Negotiation of the first and only covered agreement to date was jointly led by Treasury and its Federal Insurance Office and the USTR, pursuant to the Federal Insurance Office Act of 2010.¹⁶⁴

b) Benefits to the United States

The U.S.-EU Covered Agreement addresses three areas of prudential insurance supervision: group supervision; reinsurance, including reinsurance collateral; and exchange of information between supervisory authorities. The agreement resolves longstanding concerns arising both from the prudential approach of U.S. states to insurers that cede business to EU reinsurers, and from the prudential approach of EU member states to U.S. insurance groups conducting business in the EU.¹⁶⁵ The agreement addresses these matters while protecting consumers and affirming

¹⁶¹ The U.S. Department of State maintains the U.S.-EU Covered Agreement on its website. See “Texts of International Agreements to which the US is a Party (TIAS),” U.S. Department of State, <https://www.state.gov/s/l/treaty/tias/index.htm>; covered agreement itself available at <https://www.state.gov/documents/organization/282149.pdf>. Background information and a collection of related documents are also accessible on FIO’s website. “Initiatives: U.S. and EU Covered Agreement,” FIO, https://www.treasury.gov/initiatives/fio/Pages/EU_Covered_Agreement.aspx. See also FIO, 2017 Annual Report, 96-98.

¹⁶² “Initiatives: EU-U.S. Insurance Dialogue Project,” FIO, last updated September 10, 2018, <https://www.treasury.gov/initiatives/fio/EU-US%20Insurance%20Project/Pages/default.aspx>.

¹⁶³ Federal Insurance Office Act of 2010, § 313(r).

¹⁶⁴ Federal Insurance Office Act of 2010, § 314(a).

¹⁶⁵ Treasury, “Treasury, USTR Sign Covered Agreement on Prudential Insurance and Reinsurance Measures with the European Union,” news release, September 26, 2017, <https://home.treasury.gov/news/press-releases/sm0164>. See generally FIO, *How To Modernize And Improve The System Of Insurance Regulation In The United States*

the U.S. system of insurance regulation, including the role of state insurance regulators as the primary supervisors of the business of insurance in the United States.¹⁶⁶ As stated by Secretary Mnuchin at the time of signing: “By providing regulatory clarity and reducing regulatory burden, the Agreement enables American companies to be more competitive in the EU, enhances opportunities for U.S. insurers and reinsurers at home and abroad, and furthers the administration’s goal of sustained economic growth.”¹⁶⁷ The benefits to the United States of key agreement provisions are further described later in this discussion.

c) Transparency and the U.S. Policy Statement

Throughout the negotiations, which concluded in January 2017,¹⁶⁸ Treasury and USTR consulted with the congressional committees designated in the Federal Insurance Office Act,¹⁶⁹ and worked closely with other federal government agencies, and a task force of state insurance supervisors.¹⁷⁰ Prior to the announcement in July 2017 that the United States would sign the U.S.-EU Covered Agreement,¹⁷¹ Treasury and USTR consulted closely with a range of industry stakeholders concerning the final text of the agreement, as well as with the NAIC, individual state insurance supervisors, and other interested parties.¹⁷²

(December 2013), 37-38, <https://www.treasury.gov/initiatives/fio/reports-and-notices/Documents/How%20to%20Modernize%20and%20Improve%20the%20System%20of%20Insurance%20Regulation%20in%20the%20United%20States.pdf>.

¹⁶⁶ Treasury and USTR advised Congress in 2015 that achievement of a covered agreement with the EU would “further confirm that the existing U.S. insurance regulatory system serves the goals of insurance sector oversight, policyholder protection, and national and global financial stability.” Letter from Anne Wall, Assistant Secretary for Legislative Affairs, Department of the Treasury and Mike Harney, Assistant U.S. Trade Representative for Congressional Affairs, Office of the U.S. Trade Representative to Senator Richard Shelby, *et al.* (November 20, 2015), <https://www.treasury.gov/initiatives/fio/reports-and-notices/Documents/Covered%20Agreement%20Letters%20to%20Congress.pdf>.

¹⁶⁷ Treasury, “Treasury, USTR Sign Covered Agreement on Prudential Insurance and Reinsurance Measures with the European Union,” news release, September 26, 2017, <https://home.treasury.gov/news/press-releases/sm0164>; Treasury, “Joint Statement on Upcoming Signature of the Bilateral Agreement between the European Union and the United States of America on Prudential Measures Regarding Insurance and Reinsurance,” news release, September 22, 2017, <https://home.treasury.gov/news/press-releases/sm0163>.

¹⁶⁸ USTR, “Joint Statement on U.S.-EU Negotiations for a Bilateral Agreement on Insurance and Reinsurance Measures,” news release, January 13, 2017, <https://ustr.gov/about-us/policy-offices/press-office/press-releases/2017/january/joint-statement-us-eu-negotiations>.

¹⁶⁹ The designated congressional committees are the House of Representatives Committee on Financial Services, House Committee on Ways and Means, Senate Committee on Banking, Housing, and Urban Affairs, and Senate Committee on Finance. *See* 31 U.S.C. § 314(b)(1).

¹⁷⁰ FIO, *2017 Annual Report*, 96-98.

¹⁷¹ Treasury, “Treasury, USTR Notice of Intent to Sign,” news release, July 14, 2017, <https://www.treasury.gov/press-center/press-releases/Pages/sm0124.aspx>.

¹⁷² Congress also heard from a range of stakeholders, including the NAIC, in two public hearings convened during this period. Financial Services Committee, “Subcommittee Assesses U.S.-EU Covered Agreement,” news release, (February 16, 2017), <https://financialservices.house.gov/news/documentsingle.aspx?DocumentID=401523>; *Assessing the U.S.-EU Covered Agreement: Hearing Before the Subcommittee on Housing and Insurance of the*

These consultations were followed by a reaffirmation from Treasury and USTR to work closely with the NAIC, state insurance regulators, and other stakeholders regarding implementation and administration of the U.S.-EU Covered Agreement. That undertaking is reflected in a “Policy Statement” published by Treasury and USTR on the same date the United States and European Union signed the agreement, stating in part:

- “The United States commits to regular and substantive engagement with stakeholders throughout its implementation of this Agreement;” and
- “Because U.S. state regulators will be largely responsible for implementing the Agreement, the United States is committed to the direct involvement of state insurance regulators, including their staff, in the work of the Joint Committee. To this end, the United States will consult with state insurance regulators, and will establish a robust consultative process to ensure that discussions in the Joint Committee will be well-informed of the views and interests of state insurance regulators.”¹⁷³

The Policy Statement, which was acknowledged with appreciation by the NAIC and other stakeholders,¹⁷⁴ also: restates the benefits of the U.S.-EU Covered Agreement for the United States; notes that the United States will make every effort to ensure that the EU implements its obligations under the agreement, while carrying out the United States’ own obligations; and provides additional clarity for U.S. insurance regulators and industry participants by addressing the U.S. understanding of several provisions of the agreement on which some stakeholders sought additional detail.¹⁷⁵

Committee on Financial Services, U.S. House of Representatives, 115th Cong. (February 16, 2017), <https://financialservices.house.gov/uploadedfiles/115-2.pdf>; Examining the U.S.-EU Covered Agreements, Senate Committee on Banking, Housing, and Urban Affairs, 115th Cong. (May 2, 2017), <https://www.banking.senate.gov/hearings/examining-the-us-eu-covered-agreements>.

¹⁷³ United States, *Statement of the United States on the Covered Agreement with the European Union* (September 22, 2017), https://www.treasury.gov/initiatives/fio/reports-and-notice/Documents/US_Covered_Agreement_Policy_Statement_Issued_September_2017.pdf. As noted in the Policy Statement, the U.S.-EU Covered Agreement is the final legal text negotiated between the Parties and it contains important legal conditions and other terms not summarized in the Policy Statement.

¹⁷⁴ “We appreciate the Treasury and USTR working constructively with us to resolve our concerns with the covered agreement, but would caution against using this mechanism in the future.” NAIC, “9/22/17 – NAIC Responds to Covered Agreement,” news release, September 22, 2017, https://www.naic.org/newsroom_statement_170922_responds_to_covered_agreement.htm. See also “NAMIC, NAIC Laud U.S. Policy Statement Issued with Covered Agreement,” *World Trade Online*, September 25, 2017, <https://insidetrade.com/daily-news/namic-naic-laud-us-policy-statement-issued-covered-agreement>.

¹⁷⁵ See, e.g., written testimony concerning “a list of provisions ... that we would like clarified before the United States moves forward with implementation of the Agreement.” *Examining the United States-European Covered Agreement, Before the Senate Committee on Banking, Housing, and Urban Affairs*, 115th Cong. (May 2, 2017), (statement of Julie Mix McPeak, NAIC President-Elect), <https://www.banking.senate.gov/imo/media/doc/McPeak%20Testimony%205-2-17.pdf>.

2. Implementation by Federal and State Authorities

The U.S.-EU Covered Agreement advances U.S. reinsurance collateral reform, an effort that the NAIC and state insurance regulators began nearly two decades ago, but which had lost momentum at the time the Federal Insurance Office Act was passed, and which was still progressing slowly when the U.S.-EU negotiations were announced in 2015.¹⁷⁶ The U.S.-EU Covered Agreement builds on the work of the states by establishing that EU reinsurers of sufficient financial strength, and which meet consumer protection provisions established in the agreement, will not have to post collateral for liabilities they assume from U.S. ceding insurers as a condition for state regulators permitting those insurers to take “credit” for the reinsurance under statutory insurance accounting.¹⁷⁷

In addition, the U.S.-EU Covered Agreement resolves issues arising under Solvency II (the EU insurance regulatory directive that went into effect in 2016) for U.S. insurance groups with operations in the EU, and for U.S. reinsurers assuming business from EU insurers. Under the agreement, the EU agrees not to apply aspects of its prudential approach to solvency regulation to U.S. insurers and reinsurers. Instead, the agreement establishes specific conditions whereby both the EU and the United States will respect the group supervision of the home country as to group capital, governance, and reporting. Among other benefits, a U.S. insurer will now be able to operate in the EU without subjecting its U.S. parent to costly worldwide group capital requirements which may otherwise have been applicable under EU law,¹⁷⁸ and U.S. reinsurers will not be required to establish a local EU presence in order to assume business from EU ceding insurers.¹⁷⁹

Successful implementation of the U.S.-EU Covered Agreement contemplates action by the states to conform relevant laws to the provisions of the agreement, particularly regarding the conditions for elimination of collateral requirements currently applicable to EU reinsurers accepting business from U.S. ceding insurers. If that does not occur within the implementation periods set out in the agreement,¹⁸⁰ the possibility exists that inconsistent state insurance measures may be

¹⁷⁶ On the role of international reinsurance in the United States, and related U.S. prudential regulation, including collateral requirements and reform efforts, see FIO, *The Breadth and Scope of the Global Reinsurance Market and the Critical Role Such Market Plays in Supporting Insurance in the United States* (December 2014), 23-25, <https://www.treasury.gov/initiatives/fio/reports-and-notice/Documents/FIO%20-Reinsurance%20Report.pdf>; FIO, *Annual Report on the Insurance Industry* (September 2014), 45-47, https://www.treasury.gov/initiatives/fio/reports-and-notice/Documents/2014_Annual_Report.pdf.

¹⁷⁷ “Credit for reinsurance” describes the degree to which, under U.S. statutory insurance accounting, ceding insurers are permitted to recognize transfers of risk to reinsurers as reductions of policy liabilities or as assets, thereby freeing up regulatory capital to support new and existing business. FIO, *Reinsurance Report*, 11.

¹⁷⁸ Article 4 of the U.S.-EU Covered Agreement.

¹⁷⁹ Article 3 of the U.S.-EU Covered Agreement.

¹⁸⁰ Under Article 9, Paragraph 4 of the U.S.-EU Covered Agreement, the United States is obligated to begin evaluating state laws for potential preemption not later than the first day of the month, 42 months after the date the agreement was signed, i.e., by March 1, 2021, and it “shall complete any necessary preemption determination” not

federally preempted in accordance with the Federal Insurance Office Act.¹⁸¹ However, Treasury would not need to exercise this authority with respect to any state that conforms its laws to the provisions of the U.S.-EU Covered Agreement within the specified time period. In this regard, since the agreement was signed, the NAIC has demonstrated its commitment to, and has made considerable progress toward, setting the stage for state implementation, including through the recent activities described below.

a) Reinsurance Collateral

NAIC February 2018 Hearing. In February 2018, the NAIC held a public hearing to consider the reinsurance collateral provisions of the U.S.-EU Covered Agreement. Among other questions, interested parties were asked to address “[a]mending the Credit for Reinsurance Model Law (#785) and the Credit for Reinsurance Model Regulation (#786) to eliminate reinsurance collateral requirements for EU-based reinsurers meeting the conditions of the Covered Agreement.”¹⁸² Multiple state insurance supervisors – including those in leadership positions at the NAIC – attended the hearing, as did representatives of Treasury and USTR.¹⁸³ Thereafter, the NAIC Executive Committee was asked to approve development of model law and regulation provisions to implement the U.S.-EU Covered Agreement.¹⁸⁴

NAIC Spring National Meeting. At its Spring National Meeting in March 2018, the NAIC took steps to continue development of model law and regulation provisions to operationalize the U.S.-EU Covered Agreement. In a meeting of the Reinsurance Task Force, its Chair summarized the progress to date, including the February 2018 hearing submissions and the

later than the first day of the month, 60 months after signature (September 1, 2022). *See also* Article 10, Paragraph 2(d) of the U.S.-EU Covered Agreement.

¹⁸¹ Subject to certain procedures, including providing notice and an opportunity for public comment, a state insurance measure shall be preempted if the FIO Director determines that it results in less favorable treatment of a non-United States insurer domiciled in a foreign jurisdiction that is subject to a covered agreement than a United States insurer domiciled, licensed, or otherwise admitted in that state, and is inconsistent with the covered agreement. 31 U.S.C. § 313(f).

¹⁸² “NAIC Notice of Public Hearing and Request for Comments,” NAIC, December 21, 2017, https://www.naic.org/documents/cmte_e_reinsurance_related_180220_public_hearing_notice.pdf. The notice and hearing were also directed to extending similar treatment to reinsurers from jurisdictions which might, in the future, be party to a covered agreement with the United States, and to reinsurers from NAIC “qualified jurisdictions.” NAIC considerations concerning non-EU jurisdictions are discussed below.

¹⁸³ A summary of the February 20, 2018 hearing appears in the draft minutes of the NAIC Spring National Meeting, which were included in materials provided to the Reinsurance Task Force for the 2018 Summer National Meeting. NAIC, *Draft Pending Adoption* (March 30, 2018), 2, https://www.naic.org/meetings1808/cmte_e_reinsurance_2018_summer_nm_materials.pdf. A compilation of the 20 comment letters submitted in advance of the February 20, 2018 NAIC hearing is also available. *See* NAIC, *Covered Agreement Public Hearing Held on February 20, 2018: Comment Letters*, https://www.naic.org/documents/cmte_e_reinsurance_related_180220_public_hearing_comment_letters.pdf.

¹⁸⁴ NAIC, *Executive Committee Conference Call* (April 17, 2018), contained within NAIC, *2018 Summer National Meeting: Executive Committee Agenda* (August 5, 2018), Attachment 4, https://www.naic.org/meetings1808/cmte_ex_2018_summer_nm_materials.pdf.

subsequent correspondence to the Financial Condition Committee. The Chair reported, further, that a meeting of the Executive Committee had been scheduled to consider adoption of the model law development request.¹⁸⁵

Formal NAIC Decision to Move Forward and Draft Model Revisions. In April 2018, the NAIC Executive Committee approved the request for work to commence on the model law and regulation revisions and considered how the revisions would be expected in due course to become a standard that each State would need to implement as law in accordance with the NAIC accreditation process.¹⁸⁶ The work proceeded and, on June 21, 2018, the Reinsurance Task Force exposed for public comment proposed revisions to the NAIC Credit for Reinsurance Model Law (#785) and Credit for Reinsurance Model Regulation (#786) intended to incorporate relevant provisions of the U.S.-EU Covered Agreement.¹⁸⁷

NAIC Summer National Meeting. The NAIC Reinsurance Task Force met on August 6, 2018. The meeting agenda included discussion of the recently proposed revisions to the NAIC model law and regulation on credit for reinsurance that were published by the NAIC in June to address the U.S.-EU Covered Agreement.¹⁸⁸

Stakeholder comments presented at this meeting were generally supportive of the NAIC work on conforming its model law and regulation to the U.S.-EU Covered Agreement, and reiterated points made in the written submissions in advance of the meeting.¹⁸⁹ These submissions generally addressed the following: (1) with respect to provisions applicable to EU reinsurers, the

¹⁸⁵ NAIC, *Draft Pending Adoption*. See also NAIC, *Spring Volume I: 2018 Proceedings of the National Association of Insurance Commissioners*, 1656-1820, <https://www.naic.org/documents/PRC-ZS-18-01.pdf>.

¹⁸⁶ NAIC, *Executive Committee Conference Call*. The NAIC Accreditation Program was established to develop and maintain uniform baseline standards in all states, for the purpose of promoting effective insurance company financial solvency regulation. “Accreditation,” NAIC, last updated July 18 2018, https://www.naic.org/cipr_topics/topic_accreditation.htm.

¹⁸⁷ Draft Credit for Reinsurance Model Law (NAIC 2018), https://www.naic.org/documents/cmt_e_reinsurance_180621_model_law.pdf; Draft Credit for Reinsurance Model Regulation (NAIC 2018), https://www.naic.org/documents/cmt_e_reinsurance_180621_model_regulation.pdf.

¹⁸⁸ NAIC, *2018 Summer National Meeting: Reinsurance Task Force Agenda* (August 6, 2018), https://www.naic.org/meetings1808/cmt_e_reinsurance_2018_summer_nm_materials.pdf. Supporting documents for the Reinsurance Task Force meeting, including minutes from its Spring 2018 meeting, draft model law revisions, and public comments, are available in the Spring 2018 Proceedings. Final committee minutes and proceedings of NAIC national meetings are typically available at no cost following adoption at the subsequent meeting, (i.e., those for the August 2018 Summer National Meeting should be posted after the Fall meeting and available on the NAIC website. “Proceedings of the NAIC,” NAIC, https://www.naic.org/prod_serv_alpha_listing.htm#proceedings.

¹⁸⁹ A compilation of the 18 comments letters submitted to the Reinsurance Task Force in advance of the NAIC August 2018 Summer National Meeting is available at on the NAIC website. See NAIC, *Comment Letters*, https://www.naic.org/documents/cmt_e_reinsurance_180724_comment_combined.pdf. Although FIO has reviewed the draft minutes of the August 6, 2018 Reinsurance Task Force meeting, as of this writing they are not yet publicly available. Various meeting summaries are available. See Eversheds Sutherland, *Legal Alert: NAIC Report – 2018 Summer National Meeting* (August 15, 2018), <https://us.eversheds-sutherland.com/NewsCommentary/Legal-Alerts/213648/Legal-Alert-NAIC-Report-2018-Summer-National-Meeting>.

importance of ensuring the model revisions conform accurately and fully to the terms of the U.S.-EU Covered Agreement; (2) the need to move rapidly to next steps, and to ensure timely and uniform adoption and administration by the states of the prudential laws and regulations which implement the U.S.-EU Covered Agreement; and (3) with respect to provisions applicable in the case of reinsurers from (non-EU) “qualified jurisdictions,” the importance of minimizing differences in treatment as compared to that of U.S. and EU reinsurers. The NAIC’s plan to extend to certain non-EU jurisdictions treatment of reinsurance collateral analogous to that under the U.S.-EU Covered Agreement is discussed below.

At the conclusion of the August 2018 Reinsurance Task Force meeting, the Chair announced that the Task Force would work with NAIC staff to develop updated drafts, targeted for public exposure in mid-September 2018, with the goal of having final drafts ready for consideration by the time of the NAIC’s Fall National Meeting (November 15-18, 2018).¹⁹⁰

b) Group Capital

Under the U.S.-EU Covered Agreement, if U.S. insurance supervisors do not develop and implement a group capital assessment applicable to U.S. groups with EU insurance operations, EU regulators would not be barred from imposing Solvency II group capital requirements on such groups.¹⁹¹ The NAIC’s interest in developing a group capital calculation, however, predates the U.S.-EU Covered Agreement. The NAIC has noted that its decision to develop an analytical framework for evaluating the capital positions of insurance group members (both insurers and non-insurers) is an outgrowth of the financial crisis and, to that end, an NAIC working group published a discussion paper addressing “group capital methodologies concepts” in 2014,¹⁹² followed by publication of a *Discussion Draft on Approaches to a Group Capital Calculation* in July 2015.¹⁹³

State insurance regulators are working on a group capital calculation “intended to provide additional analytical information to the lead state for use in assessing group risks and capital

¹⁹⁰ The NAIC stated in a model law development report that it will be in a position to finalize these changes by the end of 2018. See NAIC, *Model Law Development Report* (August 2, 2018), contained within *2018 Summer National Meeting: Joint Meeting of Executive Committee and Internal Administration Subcommittee* (August 4, 2018), Attachment 10, https://www.naic.org/meetings1808/cmtc_ex_2018_summer_nm_materials.pdf.

¹⁹¹ Article 10 of the U.S.-EU Covered Agreement.

¹⁹² NAIC ComFrame Development and Analysis Working Group, *U.S. Group Capital Methodology Concepts Discussion Paper* (November 16, 2014), https://www.naic.org/documents/committees_g_cfwg_exposure_disc_paper_us_grp_cap_method_concepts.pdf.

¹⁹³ NAIC ComFrame Development and Analysis Working Group, *Discussion Draft on Approaches to a Group Capital Calculation* (July 23, 2015), https://www.naic.org/documents/committees_g_cfwg_related_us_group_capital_calc_draft.pdf.

adequacy” as an additional tool to current holding company analysis.¹⁹⁴ That work – focused on developing an RBC aggregation methodology – is ongoing.¹⁹⁵

c) Implementation by the United States

The U.S.-EU Covered Agreement provides for a period of up to five years after signature for the United States to have in place measures which implement the terms of Article 3 of the agreement, relating to the prudential conditions for elimination of collateral requirements for EU reinsurers assuming business from U.S. insurers.¹⁹⁶ Even after appropriate NAIC model law revisions are finalized, codification in state law will require legislative or administrative steps in each state, the District of Columbia, and U.S. territories. Therefore, the U.S.-EU Covered Agreement includes a post-signature implementation period, both allowing for state-level action and reflecting the necessity for steady progress by the states in achieving the required reinsurance collateral reforms.

Beginning on the earlier of the date of provisional application, which was November 7, 2017,¹⁹⁷ or the date of entry into force, which was April 4, 2018,¹⁹⁸ the United States has the following obligations concerning implementation and measures prior to implementation:

- to “encourage relevant authorities to refrain from taking any measures which are inconsistent with any of the conditions or obligations of the Agreement, including with respect to the elimination of collateral and local presence requirements pursuant to Article 3.” (Article 9, Paragraph 1);
- to “take all measures, as appropriate, to implement and apply this Agreement as soon as possible in accordance with Article 10.” (Article 9, Paragraph 2);
- to “encourage each U.S. State to promptly... implement[] ... relevant U.S. State credit for reinsurance laws and regulations consistent with Article 3, as the method for adopting measures in conformity with paragraphs 1 and 2 of that Article,” i.e., with respect to not maintaining or adopting requirements for collateral or local presence with respect to relevant EU reinsurers, nor maintaining or adopting any new requirement with

¹⁹⁴ “Supervision of Insurance Groups,” NAIC, last updated July 12, 2018, https://www.naic.org/cipr_topics/topic_group_supervision.htm. See also NAIC, *Group Capital Calculation Working Group 2018 Charge*, https://www.naic.org/cmte_e_grp_capital_wg.htm.

¹⁹⁵ For more on the NAIC work on group capital, see Section II.A.1 of this Report.

¹⁹⁶ Articles 9 and 10 of the U.S.-EU Covered Agreement.

¹⁹⁷ Article 10, Paragraph 2 of the U.S.-EU Covered Agreement. See Notice Concerning the Provisional Application of the Bilateral Agreement between the European Union and the United States of America on Prudential Measures Regarding Insurance and Reinsurance (EU), 2017 O.J. (L 288), <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2017:288:TOC>.

¹⁹⁸ Article 8 of the U.S.-EU Covered Agreement. See Notice Concerning the Entry into Force of the Bilateral Agreement between the European Union and the United States of America on Prudential Measures Regarding Insurance and Reinsurance, (EU), 2018 O.J. (L 91), <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2018:091:TOC>.

substantially the same regulatory impact on relevant EU reinsurers. (Article 9, Paragraph 3(b)); and

- to “encourage each U.S. State to promptly ... reduce[], in each year following the date of entry into force or provisional application of the Agreement ... the amount of collateral required by each State to allow full credit for reinsurance by 20 percent of the collateral that the U.S. State required as of January 1 before signature of this Agreement” (i.e., January 1, 2017) with respect to relevant EU reinsurers. (Article 9, Paragraph 3(a).

Treasury remains committed to ensuring that the United States complies with the U.S.-EU Covered Agreement, and encourages the states to fulfill the applicable steps outlined above. Together with USTR, Treasury has publicly encouraged state insurance regulators to take the steps outlined above, including making the following statement even before the date of provisional application:

In accordance with Article 9, the United States encourages each U.S. state to promptly adopt relevant credit for reinsurance laws and regulations consistent with Article 3, and to phase-out the amount of collateral required by each U.S. state to allow full credit for reinsurance cessions to EU reinsurers.¹⁹⁹

This encouragement to the states is ongoing, and applies to state-level implementation both with respect to Article 3 (reinsurance) and Article 4 (group supervision), recognizing that expeditious movement toward full implementation in both reinsurance and group supervision is in both the national interest and the best interests of the U.S. insurance sector.²⁰⁰

d) Application of the Agreement

As noted above, under Article 9 certain implementation provisions were triggered as of the November 7, 2017 date of provisional application. A key obligation of the Parties under Article 9 is to “take all measures, as appropriate, to implement and apply this Agreement as soon as possible in accordance with Article 10.”²⁰¹ Article 10 addresses “Application of the Agreement.” Under Paragraph 1 of Article 10, the agreement shall apply 60 months from the date of signature, except as otherwise specified. Much of the rest of Article 10 addresses the parties’ obligations in the interim, some of which are briefly summarized below.

¹⁹⁹ United States, *Statement of the United States on the Covered Agreement*, 1. In the same statement, the United States publicly encouraged U.S. insurance supervisory authorities to “enhance cooperation and information sharing [with EU member state insurance supervisors], while respecting a high standard of confidentiality protection,” through use of the voluntary practices and the Model Memorandum of Understanding Provisions on Exchange of Information” per Article 5 and the Annex.

²⁰⁰ See, e.g., United States and European Union, “First Joint Committee Meeting Under the Bilateral Agreement between the European Union and The United States of America on Prudential Measures Regarding Insurance and Reinsurance,” news release, March 27, 2018, <https://home.treasury.gov/news/press-releases/sm0334>.

²⁰¹ Article 9, Paragraph 2 of the U.S.-EU Covered Agreement.

Under Article 10, the EU is obligated as of provisional application to ensure that supervisors and other competent authorities follow the Group Supervision practices outlined in Article 4 with respect to U.S. insurers with EU operations.²⁰² Unless the United States does not meet its obligations under the agreement, U.S. insurance groups with operations in the EU are therefore no longer subject to worldwide prudential insurance group supervision by EU authorities – including worldwide group governance, solvency and capital, and reporting²⁰³ – as could otherwise be the case under Solvency II. This means that U.S. groups with insurance operations in the EU will not be subject at the worldwide level to the EU’s Solvency II group capital requirement, pursuant to Article 4 of the agreement. As noted above, avoidance of such steps under Solvency II – which are not consistent with the U.S. state approach to prudential supervision and could have led the EU to apply costly and unnecessarily burdensome standards to U.S. insurance groups with EU operations – is an important U.S. achievement under the U.S.-EU Covered Agreement.

Under Article 4, Paragraph (h) of the U.S.-EU Covered Agreement, however, it is necessary for U.S. groups with insurance operations in the EU to be subject to a U.S. group capital assessment in order to avoid potential application by EU regulators of the Solvency II group capital requirement. As noted above, there is not presently a group capital assessment in the United States, but the NAIC is now engaged in developing a group capital calculation.²⁰⁴ Under the agreement, the United States currently enjoys a 60-month period (which commenced on November 7, 2017), during which EU authorities have agreed that U.S. insurance groups will not be subject to Solvency II group capital requirements, notwithstanding the absence of a U.S. group capital assessment.²⁰⁵ FIO will continue to closely monitor the NAIC and state insurance regulators on the group capital calculation.

Under Article 10, the EU is also obligated to ensure that within two years from signature, its member states have revised applicable laws to implement the provisions of Article 3, Paragraph 3, permitting U.S. reinsurers to assume business from EU ceding insurers without establishing a “local presence” in the EU, as otherwise could be demanded when an assuming reinsurer is not from either an EU member state or a supervisory jurisdiction deemed equivalent pursuant to the Solvency II Directive.²⁰⁶ FIO understands that such requirements, which had been an operational concern for some U.S. reinsurers before the legal text of the U.S.-EU Agreement was finalized in January 2017, are no longer an impediment to such business,²⁰⁷ because of the EU’s

²⁰² See Article 10, Paragraph 2(a) of the U.S.-EU Covered Agreement.

²⁰³ Article 4, Paragraph (a) of the U.S.-EU Covered Agreement.

²⁰⁴ See also Section II.A.1 of this Report.

²⁰⁵ Article 10, Paragraph (e) of the U.S.-EU Covered Agreement.

²⁰⁶ Article 10, Paragraph 2(g) of the U.S.-EU Covered Agreement.

²⁰⁷ The German Federal Financial Supervisory Authority (BaFin) stated “The EU and the USA have signed a bilateral agreement that will make it possible for contracts to be concluded between a reinsurer from the USA and a primary insurance undertaking or reinsurance undertaking in the EU without a branch being required in the respective EU member state.” “Authorisation: Bilateral Agreement between the European Union and the United States of America on Prudential Measures Regarding Insurance and Reinsurance,” BaFin, last updated November 8,

encouragement to member states to refrain, as contemplated by Article 9, Paragraph 1. However, for some EU member states, the relevant formal changes in law are not yet completed.

Within the EU's integrated system of national (member state) and European financial supervision, the European Insurance and Occupational Pensions Authority (EIOPA) is an independent advisory body to the European Commission, the European Parliament, and the Council of the European Union. According to EIOPA, its powers with respect to insurance include issuing guidelines and recommendations and developing draft regulatory and implementing technical standards and in that capacity it has a substantial role concerning implementation of the EU's insurance regulatory standards under Solvency II.²⁰⁸ Earlier this year, EIOPA explained its plans to "further improve the functioning of the internal market, in particular by preventing supervisory arbitrage and by guaranteeing a level playing field."²⁰⁹ FIO welcomes and appreciates EIOPA's inclusion among its "priorities" outlined in the Supervisory Convergence Plan its intention to "[m]onitor and ensure the consistent implementation by NCAs [National Competent Authorities] of the provisions of the covered agreement."²¹⁰

3. Transparency and the Joint Committee

Article 7 of the U.S.-EU Covered Agreement establishes a "Joint Committee" and calls for it to meet at least once within 180 days after the earlier of the date entry into force or provisional application of the agreement. Accordingly, the United States and the EU held the first meeting of the Joint Committee on March 6, 2018, in Brussels.²¹¹ In addition to officials from Treasury and USTR, the U.S. delegation included two U.S. state insurance commissioners (who are also senior NAIC officers).²¹² Similarly, officials of the European Commission's Directorate-General for Financial Stability, Financial Services and Capital Markets Union and Directorate-General for Trade were joined by representatives from EIOPA. The meeting was an opportunity for exchange of information on implementation progress as reflected in the parties' joint statement:

[T]he EU and the United States affirmed their commitment to continuous review of progress on the Agreement and close coordination between each side. Consistent with the Agreement, both sides shall encourage relevant authorities to refrain from taking any measures which are inconsistent with any of the conditions or obligations of the Agreement.²¹³

2017, https://www.bafin.de/EN/Aufsicht/VersichererPensionsfonds/Zulassung/US-Rueckversicherer/us-rueckversicherer_node_en.html.

²⁰⁸ "Insurance," EIOPA, <https://eiopa.europa.eu/regulation-supervision/insurance>.

²⁰⁹ EIOPA, *Supervisory Convergence Plan 2018-2019* (April 23, 2018), 3, <https://eiopa.europa.eu/Publications/Reports/Supervisory%20Convergence%20Plan%202018-2019.pdf>. "In the European context, EIOPA should ensure a high, effective and consistent level of supervision with the aim of guaranteeing a similar level of protection of policyholders and beneficiaries across jurisdictions, regardless of the location of the insurance undertaking's head office." EIOPA, *Supervisory Convergence Plan*, 1.

²¹⁰ EIOPA, *Supervisory Convergence Plan*, 11.

²¹¹ United States and European Union, "First Joint Committee Meeting Under the Bilateral Agreement."

²¹² A Federal Reserve official attended as well.

²¹³ United States and European Union, "First Joint Committee Meeting Under the Bilateral Agreement."

The state insurance commissioners assisted both in updating EU officials on the progress to date (e.g., concerning NAIC/state work concerning reinsurance collateral and a group capital assessment), and in demonstrating the cooperation of federal and state representatives on these matters. At the same time, U.S. federal and state officials were able to hear from EU counterparts regarding the progress and future steps to be taken toward full and timely implementation of EU obligations under the agreement. Additional Joint Committee meetings will be held as needed, and in any event at least once each calendar year.

4. The Path Forward

a) The Path Forward for the U.S.-EU Covered Agreement

As described above, both the United States and the EU have agreed to continue work to fully implement the agreement. Accordingly, it is expected that each side will work within its own processes and with relevant regulatory authorities to advance and monitor progress, including with respect to the following steps under the agreement:

- elimination of local presence requirements as regards U.S. reinsurers assuming business from EU ceding insurers;²¹⁴
- elimination of collateral requirements for EU reinsurers assuming business from U.S. ceding insurer;²¹⁵
- development and deployment of a U.S. group capital assessment;
- other group supervision issues as regards U.S. groups with EU operations and as regards EU groups with U.S. operations, including with respect to group level governance, solvency and capital, and reporting requirements;
- cooperation of U.S. and EU supervisory authorities in exchanging information, including through the (non-mandatory) practices outlined in the agreement;²¹⁶
- compliance with those Articles of the Agreement which currently apply in full, e.g., Articles 7 (Joint Committee), and certain technical provisions governing the agreement

²¹⁴ The United States has a reciprocal obligation not to impose local presence requirements on EU reinsurers that meet the conditions of Article 4 of the U.S.-EU Covered Agreement. FIO understands that U.S. state law does not have such requirements.

²¹⁵ The EU has a reciprocal obligation not to impose collateral requirements on U.S. reinsurers that meet the conditions of Article 4 of the U.S.-EU Covered Agreement. Although Solvency II generally bars requirements for reinsurers to post collateral (“pledging of assets”), absent the U.S.-EU Covered Agreement, EU member state authorities could impose collateral requirements for cessions to reinsurers from non-equivalent third-party jurisdictions. FIO has not been informed that EU member states are imposing this on U.S. reinsurers.

²¹⁶ See Article 5 of the U.S.-EU Covered Agreement.

such as Articles 11 (Termination and Mandatory Consultation), and 12 (Amendment);²¹⁷ and

- conduct and timing of U.S. preemption analysis.²¹⁸

FIO expects that the United States and the EU will also keep each other informed of their respective progress and processes, including through the Joint Committee. Within the United States, Treasury will continue encouraging NAIC officials and staff, together with state insurance supervisors, to finalize their work on developing reinsurance collateral model law and regulation revisions, as well as on developing a group capital calculation that meets the requirements of the U.S.-EU Covered Agreement. As such work becomes more advanced, Treasury believes that it will become increasingly important to enhance federal and state cooperation and collaboration regarding the requirements and mechanisms under consideration for both reinsurance collateral and the group capital calculation.

b) The Path Forward Concerning Non-EU Jurisdictions

At its February 2018 hearing concerning steps to implement the U.S.-EU Covered Agreement, the NAIC requested comments from stakeholders in response to two points concerning treatment of reinsurers from jurisdictions which may in the future be party to a covered agreement, and concerning non-U.S. (and non-EU) reinsurers from the NAIC qualified jurisdictions,²¹⁹ i.e., Bermuda, Switzerland, Japan, and the U.K. after Brexit:

- “Extending similar treatment to reinsurers from other jurisdictions covered by potential future covered agreement(s) that might be negotiated pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act.”

²¹⁷ See Article 10, Paragraph 2(i) of the U.S.-EU Covered Agreement. See also Article 10, Paragraph 3 of the U.S.-EU Covered Agreement, whereby if a Party does not adhere to Article 10, Paragraph 2 (concerning schedules and conditions for application by the United States and the EU of certain provisions of Article 3 and Article 4 by the dates stipulated therein), the other Party may seek mandatory consultation through the Joint Committee.

²¹⁸ See Article 9, Paragraph 4 of the U.S.-EU Covered Agreement.

²¹⁹ A “Qualified Jurisdiction” is one which the NAIC has determined meets certain standards concerning prudential supervision and other matters, such that U.S. insurers ceding risk to NAIC “certified reinsurers” from such qualified jurisdiction may be permitted to recognize full credit for reinsurance while the reinsurer posts a specified reduced percentage of reinsurance collateral. A jurisdiction may be added to the qualified jurisdiction list maintained by the NAIC based on evaluations performed by NAIC committees and staff. It is up to individual states, however, to determine whether to treat a jurisdiction as qualified. Some states have not yet adopted the revisions to the model law framework that incorporates the qualified jurisdiction and certified reinsurer approach. See generally NAIC Reinsurance Task Force, *Process for Developing and Maintaining the NAIC List of Qualified Jurisdictions* (August 17, 2014), https://www.naic.org/documents/committees_e_reinsurance_related_qualified_jurisdictions_final_130827.pdf.

- “Providing reinsurers domiciled in NAIC Qualified Jurisdictions with similar reinsurance collateral requirements.”²²⁰

In response, many commenters, both from the United States and from non-U.S. jurisdictions, suggested (with varying levels of detail) that the NAIC should amend the relevant models to add a new category whereby collateral could be eliminated for certain reinsurers domiciled in NAIC qualified jurisdictions.²²¹

At the March 2018 NAIC Reinsurance Task Force meeting discussed above, the Chair observed that it was “the general consensus among many of the impacted parties that the NAIC should amend [Models #785 and #786] to afford reinsurers domiciled in other NAIC-qualified jurisdictions with similar reinsurance collateral requirements as that provided under the Covered Agreement [with the EU].” The Chair also observed that U.S. insurers were clear that changes in law to accommodate full reinsurance collateral elimination for additional jurisdictions must be accompanied by requirements for those jurisdictions to accord the U.S. regulatory system the same treatment and recognition addressed in the U.S.–EU Covered Agreement.²²²

The draft model law and regulation revisions put forward by the NAIC in June 2018, and discussed by the NAIC Reinsurance Task Force in August 2018, introduce the concept of a “reciprocal jurisdiction,” generally defined in the draft NAIC documents as a non-U.S. jurisdiction that has entered into a covered agreement with the United States; or an NAIC qualified jurisdiction which is not party to a covered agreement but which meets certain additional specified requirements.²²³ As described by the Task Force at its August meeting, a U.S. ceding insurer transferring risk to reinsurers from such “reciprocal” jurisdictions would be able to take full credit for the reinsurance without obtaining collateral from reinsurers, provided that such reinsurers also satisfy consumer protection requirements analogous to those applicable to EU reinsurers under the U.S.-EU Covered Agreement.²²⁴

FIO is closely monitoring these NAIC efforts to introduce collateral elimination on a wider and more uniform basis for reinsurers from jurisdictions with strong prudential frameworks. As

²²⁰ “NAIC Notice of Public Hearing and Request for Comments,” NAIC, December 21, 2017, https://www.naic.org/documents/cmte_e_reinsurance_related_180220_public_hearing_notice.pdf

²²¹ See, e.g., comments of the Association of Bermuda Insurers and Reinsurers stating: “The tremendous work done by the NAIC and states to evaluate regulatory regimes and qualify jurisdictions should be recognized by extending the same terms for EU-based certified reinsurers to those reinsurers domiciled in qualified jurisdictions and individually certified.” Letter from John M. Huff, Association of Bermuda Insurers and Reinsurers President and CEO to Superintendent Maria T. Vullo *et al.* (February 6, 2018), contained within NAIC, *Covered Agreement Public Hearing held on February 20, 2018: Comment Letters*, https://www.naic.org/documents/cmte_e_reinsurance_related_180220_public_hearing_comment_letters.pdf.

²²² NAIC, *Draft Pending Adoption* (March 30, 2018), 2, https://www.naic.org/meetings1808/cmte_e_reinsurance_2018_summer_nm_materials.pdf.

²²³ Draft Credit for Reinsurance Model Law (NAIC 2018), § 2.F(2).

²²⁴ § 2.F(1). FIO expresses no view at this time as to whether the current draft model law revisions, if enacted into law, would place affected reinsurers on a level playing field with U.S. reinsurers or even with EU reinsurers.

noted above, FIO has long advocated development and uniform implementation of collateral reform. FIO also notes that the NAIC, state regulators, and other stakeholders generally expressed a similar view that the United States should continue to seek parallel commitments from affected non-U.S. jurisdictions to appropriate prudential treatment of U.S. insurers and reinsurers by the relevant non-U.S. regulator.

Finally, FIO recognizes the importance of maintaining continuity on prudential insurance matters with the UK as it exits the EU, including with respect to the areas covered by the U.S.-EU Covered Agreement. A U.S.-UK covered agreement that is based on the U.S.-EU Covered Agreement, which currently applies to the UK as a member of the EU, may be beneficial to both jurisdictions, as the UK exits the EU, and is a topic that FIO will be watching closely. The UK is the fourth largest global insurance market by life and nonlife direct written premium, and UK insurers (such as the Lloyd's market) are important sources of insurance and reinsurance capacity in the United States.²²⁵

C. EU-U.S. Insurance Project

FIO has continued its work with the EU-U.S. Insurance Project, which was established in 2012 as a collaborative effort among U.S. and EU authorities in the insurance sector to contribute to an increased mutual understanding and enhanced cooperation between the EU and the United States to promote business opportunity, consumer protection, and effective supervision.²²⁶ In 2017 and 2018, the EU-U.S. Insurance Project focused on: insurer cybersecurity and cyber risk insurance products; the use and implications of big data in insurance underwriting; and building increased cooperation and understanding on insurance-related intracompany transactions.²²⁷

On January 25, 2018, the EU-U.S. Insurance Project Steering Committee hosted its fifth public event in Washington, D.C. to discuss: the use of big data; cyber risks and the regulator's role; and business opportunities, challenges, and emerging risks impacting the United States and the European Union.²²⁸ The public event allowed stakeholders to hear from the Steering Committee on current project initiatives. The Steering Committee is planning to host its sixth public event on November 10, 2018, in Luxembourg. The public event will include discussions of key areas linked to the EU-U.S. Insurance Project initiatives.

²²⁵ Treasury, *EO Report*, 140.

²²⁶ See EU-U.S. Dialogue Project, *EU-US Dialogue Project: The Way Forward, Objectives and Initiatives for the Future* (December 2012), https://www.treasury.gov/initiatives/fio/EU-US%20Insurance%20Project/Documents/eu_us_dialogue_wayforward_2012. In addition to FIO, current members of the EU-U.S. Insurance Project include the NAIC, state insurance commissioners, the Federal Reserve, EIOPA, the European Commission, ACPR/ Banque de France, the Bank of England, the Central Bank of Ireland, and the De Nederlandsche Bank.

²²⁷ For a more detailed description of 2018 target outcomes and deliverables, see EU-U.S. Dialogue Project, *EU-US Insurance Dialogue Project: New Initiatives for 2017-2019; Focus Areas for 2018* (2018), https://www.treasury.gov/initiatives/fio/EU-US%20Insurance%20Project/Documents/EU-US_Initiatives_2017-2019.pdf.

²²⁸ See NAIC, "U.S. and EU Focus on Regulatory Cooperation," news release, January 25, 2018, https://www.naic.org/Releases/2018_docs/naic_us_eu_focus_on_regulatory_cooperation.htm.

D. Financial Stability Board

In April 2009, the G-20 established the FSB to monitor and make recommendations about the global financial system. One FSB initiative, as discussed in Section II.B.1 of this Report, is the identification of systemically important financial institutions, i.e., financial institutions whose distress or disorderly failure, because of their size, complexity, and systemic interconnectedness, would cause significant disruption to the wider financial system and economic activity. With respect to the insurance sector, the IAIS developed an assessment methodology in July 2013 to recommend insurers that may be eligible for identification as G-SIIs. In 2013, in consultation with the IAIS and national authorities, the FSB identified an initial list of G-SIIs. Similar annual identification processes were subsequently conducted in 2014 and 2015. In June 2016, the IAIS released an updated G-SII Assessment Methodology. Later that year, the FSB identified nine insurers as G-SIIs, including the same three U.S. groups (AIG, MetLife, and Prudential) that had also been identified under the previous methodology. In 2017, the FSB decided not to publish a new list of G-SIIs. The FSB noted that the policy measures set out in its 2016 communication on G-SIIs, as updated in February 2017 with respect to the higher loss absorbency standard, will continue to apply to the G-SIIs identified in 2016.²²⁹ At the same time, the FSB also welcomed work at the IAIS to develop an activities-based approach to systemic risk in the insurance sector, which could have implications for the identification of G-SIIs and for G-SII policy measures.

In addition, as noted in Section III.C.1 of this Report, in July 2018, the FSB published for public consultation a draft Cyber Lexicon with a set of core terms related to cybersecurity and cyber resilience in the financial sector. After considering the responses to the consultation, the FSB plans to finalize the Lexicon for delivery to the G-20 in November 2018.²³⁰ The FSB working group for this project is chaired by an official of the Federal Reserve. Treasury serves on the working group through staff from its Office of Critical Infrastructure Protection and Homeland Security. In addition, a member of FIO's staff serves on the working group, having been nominated for that role by the IAIS.

²²⁹ FSB, *Review of the List of Global Systemically Important Insurers (G-SIIs)* (November 21, 2017), <http://www.fsb.org/wp-content/uploads/P211117-2.pdf>.

²³⁰ Financial Stability Board, "FSB Publicly Consults on Cyber Lexicon," news release, July 2, 2018, <http://www.fsb.org/2018/07/fsb-publicly-consults-on-cyber-lexicon/>.

V. ECONOMIC GROWTH AND INFORMED CHOICES

This Section V provides an update on regulatory developments at the federal and state levels relating to the standards of care for retail sales of insurance and other financial products. The section then reviews regulatory developments in retirement income and LTCL, as well as the state of the LTCL industry. The section concludes with a discussion of InsurTech and regulatory responses to InsurTech.

A. Standards of Conduct

On March 15, 2018, the United States Court of Appeals for the Fifth Circuit issued a 2-1 decision vacating the Fiduciary Rule in its entirety. The decision became effective nationwide on June 21, 2018.²³¹

On April 18, 2018, the SEC proposed a comprehensive package of rulemakings and interpretations to govern the standards of conduct applicable to broker-dealers and investment advisers that provide retail investment advice. Under the SEC's proposed "Regulation Best Interest," a broker-dealer would be required to act in the best interest of a retail customer when making a recommendation of any securities transaction or investment strategy involving securities. In addition, the SEC proposed an interpretation to reaffirm and, in some cases, clarify its views regarding the fiduciary duty that investment advisers owe to their clients under federal securities laws. Both broker-dealers and investment advisers would be required to summarize their relationship to retail customers in a new short-form disclosure document. Finally, proposed Rule 15l-2 would restrict firms registered solely as broker-dealers and their associated financial professionals from using the term "adviser" or "advisor" as part of a name or title when communicating with a retail investor.²³²

During 2017 and continuing into 2018, the NAIC's Annuity Suitability Working Group considered amendments to the Suitability in Annuity Transactions Model Regulation to incorporate a best interest standard. Under the draft amendments, the Model Regulation would have been renamed the Suitability and Best Interest Standard of Conduct in Annuities Transactions Model Regulation, and would have required recommended annuity transactions to be in the consumer's best interest. On March 24, 2018, shortly after the Fifth Circuit's decision,

²³¹ *Chamber of Commerce of the United States of America v. United States Department of Labor*, 885 F.3d 360 (5th Cir. 2018).

²³² Regulation Best Interest; Proposed Rule, 83 Fed. Reg. 21574 (May 9, 2018), <https://www.gpo.gov/fdsys/pkg/FR-2018-05-09/pdf/2018-08582.pdf>, (proposing SEC Interpretation Regarding Standard of Conduct for Investment Advisers); Proposed Commission Interpretation Regarding Standard of Conduct for Investment Advisers; Request for Comment on Enhancing Investment Adviser Regulation, 83 Fed. Reg. 21203 (May 9, 2018), <https://www.federalregister.gov/documents/2018/05/09/2018-08679/proposed-commission-interpretation-regarding-standard-of-conduct-for-investment-advisers-request-for>; Form CRS Relationship Summary; Amendments to Form ADV, Required Disclosures in Retail Communications and Restrictions on the Use of Certain Names or Titles; Proposed Rule, 83 Fed. Reg. 21416 (May 9, 2018), <https://www.gpo.gov/fdsys/pkg/FR-2018-05-09/pdf/2018-08583.pdf>.

the Working Group decided to instead open up the existing Model Regulation for a 30-day public comment period. The Working Group discussed selected public comments at meetings on May 31 and August 4, 2018.²³³

On July 18, 2018, the NYDFS finalized Regulation 187, which imposes a best interest standard on the sale of both annuity and life insurance products in New York.²³⁴ The regulation places a duty on the producer (or, where there is no producer, the life insurer) to ensure that a recommendation of an annuity or life insurance policy furthers the consumer's needs and objectives when taking into consideration only the interests of the consumer and without regard to the producer's or insurer's financial compensation or incentives. The regulation imposes a number of detailed requirements on producers and insurers, including specified disclosures, establishment of a comprehensive supervisory program to achieve compliance with the regulation, producer training, and recordkeeping. The regulation becomes effective for annuity contracts on August 1, 2019, and for life insurance products on February 1, 2020. It is unclear whether and to what extent other states may follow New York's lead with respect to a best interest standard. At a meeting on May 31, 2018, the NAIC's Annuity Suitability Working Group decided not to expand the scope of the Suitability in Annuity Transactions Model Regulation to include life insurance products.

B. Retirement Income

The Retirement Enhancement and Savings Act of 2018 (RESA) was introduced in the Senate on March 8, 2018.²³⁵ The Senate Finance Committee unanimously approved an earlier version of RESA in 2016, but the bill was not put to a vote by the full Congress before lawmakers adjourned for that year. The proposed legislation would amend the Code and ERISA to modify requirements for tax-favored retirement savings accounts and employer-provided retirement plans. Several provisions of the bill are designed to encourage wider awareness and availability of guaranteed lifetime income solutions, including annuity products.²³⁶ Specifically, RESA would: require statements for employer-sponsored retirement plans (such as 401(k) plans) to include disclosure of lifetime income stream equivalents of the participant's total accrued benefits; improve the portability of lifetime income options from one plan to another so that participants could preserve these options and avoid surrender charges and fees when they change

²³³ See NAIC, *Annuity Suitability Working Group Meeting Materials* (August 4, 2018), https://naic.org/meetings1808/cmte_a_aswg_2018_summer_nm_materials.pdf.

²³⁴ NYDFS, 11 NYCRR 224 (Insurance Regulation 187) (July 17, 2018), https://www.dfs.ny.gov/insurance/r_finala/2018/rf187a1txt.pdf.

²³⁵ Retirement Enhancement and Savings Act of 2018, S.2526, 115th Cong. (2018), <https://www.congress.gov/bill/115th-congress/senate-bill/2526>. An identical bill was introduced in the House of Representatives on March 14, 2018. See Retirement Enhancement and Savings Act of 2018, H.R.5282, 115th Cong. (2018), <https://www.congress.gov/bill/115th-congress/house-bill/5282>.

²³⁶ In an annuity contract, in exchange for a premium, a life insurer agrees to make scheduled payments for the lifetimes of one or more persons, or for a specified number of years.

employers; and provide a safe harbor for plan sponsors in complying with their fiduciary duty obligations under ERISA in selecting annuity providers for plans.²³⁷

C. Long-Term Care Insurance

In recent years, Treasury and FIO have commented on the growing social need for long-term care and the steady decline of the private LTCI market.²³⁸ As of year-end 2017, an estimated 4.6 million individual LTCI coverages were in force,²³⁹ with LTCI policies paying \$9.2 billion in claims to 295,000 individuals during the year.²⁴⁰ Despite these contributions, market contraction continued in 2017, as individual sales of standalone LTCI policies totaled \$176 million, 23 percent lower than in 2016, and the estimated number of Americans purchasing new policies (67,000) dropped 27 percent from the prior year.²⁴¹ The number of insurers offering LTCI remained at an historical low (about a dozen compared to more than 100 in the early 2000s).

The financial performance of in-force LTCI policies also remains a concern for the industry, investors, and regulators. In the fourth quarter of 2017, one insurer incurred a \$9.5 billion pre-tax charge arising mainly from deteriorating results in a block of approximately 310,000 LTCI policies in runoff since 2006.²⁴² During 2018, an insurer disclosed that it expects to incur an LTCI-related charge that “is likely not to exceed \$750 million after tax,”²⁴³ while another reported a second quarter \$1.5 billion pre-tax loss arising from revised actuarial assumptions for its LTCI legacy business.²⁴⁴ In an ongoing effort to improve their operating results, companies with LTCI exposure continue to aggressively seek state regulatory approval of premium rate increases on existing policies. For example, in the first quarter of 2018, ten leading LTCI carriers filed for approval of rate increases totaling \$97 million (compared to \$49 million in the first quarter of 2017) and affecting nearly 135,000 policyholders (compared to 87 million).²⁴⁵

²³⁷ The EO Report also recommended adoption of a safe harbor for the selection of annuity providers. See Treasury, *EO Report*, 142-143.

²³⁸ See, e.g., Treasury, *EO Report*, 143; FIO, *2017 Annual Report*, 83-88.

²³⁹ LIMRA, *U.S. Individual Long-Term Care Insurance (2017 Annual Review)* (March 16, 2018), 7.

²⁴⁰ American Association for Long-Term Care Insurance, “Long Term Care Insurance Industry Paid \$9.2 Billion in Claims in 2017,” news release, January 17, 2018, <http://www.aaltci.org/news/long-term-care-insurance-association-news/long-term-care-insurance-industry-paid-9-2-billion-in-claims-in-2017>.

²⁴¹ LIMRA, *2017 Annual Review*, 3.

²⁴² GE, “GE Provides Update on Insurance Review; \$6.2B After-Tax GAAP Charge in 4Q’17,” news release, January 16, 2018, https://www.ge.com/investor-relations/sites/default/files/pressrelease%20insurance%20011618_1_1.pdf.

²⁴³ Unum Group, “Unum Group Reports Second Quarter 2018 Results,” news release, July 30, 2018, <https://investors.unum.com/file/Index?KeyFile=394419968>.

²⁴⁴ Prudential Financial, Inc., “Second Quarter 2018 Earnings Conference Call Presentation,” August 2, 2018, http://s22.q4cdn.com/600663696/files/doc_financials/quarterly_reports/2018/q2/2Q18-Earnings-Call-Presentation.pdf. The insurer exited the individual LTCI market in 2012 and the group LTCI market in 2013.

²⁴⁵ Jason Woleben, “Rate Increases for In-Force Individual LTC Policies Continued in Q1,” *S&P Global Market Intelligence*, May 14, 2018, <https://platform.mi.spglobal.com/web/client?auth=inherit#news/article?id=44552426>;

Partially offsetting the continued decline in the market for standalone LTCI policies, 2017 saw healthy growth in both new policy issuance and new premiums for “combination” products, which combine a traditional life insurance policy (or, less frequently, an annuity) with a long-term care benefit. The market for these products expanded for the third consecutive year, as life combination products generated \$4.1 billion in premiums in 2017, 18 percent higher than in 2016, and covered 260,000 new lives, a five percent increase over the prior year. This growth was driven by the introduction of new combination products by multiple companies, together with higher awareness of these types of products among insurance distributors. Measured by new lives insured, combination products now represent more than 80 percent of the market for individual LTCI solutions.²⁴⁶

State insurance regulators and the NAIC are actively reviewing a range of LTCI issues and potential policy changes to help stabilize and potentially grow the private market. In April 2017, the NAIC’s Long-Term Care Innovations Subgroup released a list of federal policy changes which the Subgroup believed could help to increase private long-term care financing options.²⁴⁷ In December 2017, in response to concerns raised by health insurers in connection with the liquidation of Penn Treaty America Corporation,²⁴⁸ the NAIC adopted amendments to the Life and Health Insurance Guaranty Association Model Act to recalibrate the cost of assessments against solvent insurers to provide coverage to policyholders of insolvent LTCI carriers. Because the guaranty association laws classify LTCI as a health insurance product, a number of health insurers were assessed for Penn Treaty’s failure even though they wrote little to no LTCI, which historically has been written primarily by life insurers. Most notably, the amendments to the Model Act: expand the assessment base for LTCI policies to include both the life/annuity account and the health account; add health maintenance organizations to the assessment base; and split the liability for an LTCI insolvency by allocating 50 percent to life and annuity insurance companies and 50 percent to health insurance companies.²⁴⁹

The NAIC has continued its review of the LTCI market and public policy options during 2018. The Long Term Care Insurance Task Force is charged with coordinating all aspects of the NAIC’s LTCI work, including areas related to financial solvency and reporting, actuarial valuation standards, transparency and predictability of rate increases, product innovations, and state and federal market stabilization solutions.²⁵⁰

Jason Woleben, “Northwestern Mutual Led the Way in Long-Term Care Rate Increases in Q1,” *SNL Financial*, May 8, 2017, <https://platform.mi.spglobal.com/web/client?auth=inherit#news/article?id=40579694>.

²⁴⁶ LIMRA, U.S. Individual Life Combination Products (2017 Annual Review).

²⁴⁷ NAIC, *Long Term Care Innovations Subgroup; Federal Policy Options to Present to Congress* (April 3, 2017), https://www.naic.org/documents/cmte_b_senior_issues_related_ltc_federal_policy_issues.pdf.

²⁴⁸ See FIO, 2017 Annual Report, 85-87.

²⁴⁹ See NAIC, “Regulators Adopt Amendments to Life and Health Guaranty Association Model Act,” news release, December 21, 2017, https://www.naic.org/Releases/2017_docs/life_health_guaranty_association_model_act.htm.

²⁵⁰ NAIC, *Long Term Care Insurance (B/E) Task Force 2018 Charges*, https://www.naic.org/cmte_b_e_ltc_tf.htm.

Treasury has convened an inter-agency task force, including representatives of the Department of Health and Human Services (HHS), Treasury, the IRS, and the Office of Management and the Budget, to develop policies to complement reforms at the state level relating to the regulation of LTCI.²⁵¹ Under the direction of Treasury and HHS, the task force has been organized and held its first meeting on July 11, 2018, and a second meeting on August 7, 2018. The task force intends, among other objectives, to review the federal policy options identified by the NAIC's Long-Term Care Innovations Subgroup (discussed above), and other potential policy changes. The task force also plans to solicit feedback from a range of stakeholders, including regulators, consumer groups, academics, and insurance industry representatives.

D. InsurTech

“InsurTech,” the insurance analog to “Fintech,” is a broad term used to describe the innovative use of technology in insurance.²⁵² Examples of innovations affecting the insurance industry include: the Internet of Things (IoT); big data; cloud infrastructure; machine learning and artificial intelligence; blockchain; and peer-to-peer, usage-based, and on-demand insurance.²⁵³

Given its potential impact on the insurance industry, regulators and policymakers have been closely observing InsurTech's development and assessing its possible effects on regulatory practices. Treasury examined InsurTech in the Fintech EO Report and concluded that lawmakers, policymakers, and regulators should:

take coordinated steps to encourage the development of innovative insurance products and practices in the United States. Domestically, this includes consideration of improving product speed to market, creating increased regulatory flexibility, and harmonizing inconsistent laws and regulations. Treasury's Federal Insurance Office ... should work closely with state insurance regulators, the NAIC, and federal agencies on InsurTech issues.²⁵⁴

1. The InsurTech Market and Recent InsurTech Developments

InsurTech funding totaled \$2.3 billion in 2017, the second highest annual total to date, and a 36 percent increase from 2016.²⁵⁵ In the first quarter of 2018, 66 InsurTech funding transactions

²⁵¹ Treasury, *EO Report*, 144.

²⁵² See, e.g., Treasury, *Fintech EO Report*, 142; FIO, *2017 Annual Report*; Organisation for Economic Co-operation Development (OECD), *Technology and Innovation in the Insurance Sector* (2017), <https://www.oecd.org/finance/Technology-and-innovation-in-the-insurance-sector.pdf>.

²⁵³ See, e.g., FIO, *2017 Annual Report*; IAIS, *Fintech Developments in the Insurance Industry* (February 21, 2017), <https://www.iaisweb.org/page/supervisory-material/other-supervisory-papers-and-reports/file/65440/report-on-fintech-developments-in-the-insurance-industry>.

²⁵⁴ Treasury, *Fintech EO Report*, 144.

²⁵⁵ Willis Towers Watson, *Quarterly InsurTech Briefing Q4 2017* (January 2018), <https://www.willistowerswatson.com/-/media/WTW/PDF/Insights/2018/01/quarterly-insurtech-briefing-q4-2017>.

took place, the highest number ever recorded.²⁵⁶ Insurers themselves have helped fund this growth, with some establishing units for venture capital deals or employing their own funds to invest in InsurTech startups.²⁵⁷ One analysis found that, in 2017 alone, 14 InsurTech startups received financial backing from some of the world's largest insurers.²⁵⁸

The insurance industry (among other sectors) continues to explore the potential for using blockchain, a technology that uses a distributed, decentralized ledger to maintain a list of data records that are certifiable, permanent, and secure.²⁵⁹ Essentially, blockchain is four technologies in one: distributed ledger (a decentralized, peer-to-peer network); cryptography; consensus (the process by which transactions are verified); and smart contracts (programmable contracts that are automatically executed when pre-defined conditions are met).²⁶⁰ Industry members are collaborating to explore this technology's potential through efforts such as the Blockchain Insurance Initiatives (B3i),²⁶¹ and The Institutes RiskBlock Alliance.²⁶²

The U.S. life insurance industry is engaging with possibilities presented by new technologies, including platforms designed to simplify and streamline the traditionally cumbersome underwriting process. Emerging underwriting platforms include: digital labor (encompassing robotic process automation, machine learning, and other cognitive technologies); blockchain; data analytics; and behavior driven models such as wearable devices.²⁶³

²⁵⁶ Willis Towers Watson, *Quarterly InsurTech Briefing Q1 2018* (May 2018), <https://www.willistowerswatson.com/-/media/WTW/PDF/Insights/2018/05/quarterly-insurtech-briefing-q1-2018.pdf>.

²⁵⁷ Oliver Suess, "InsurTech Startups Attract Growing List of Traditional Insurer Partners," *Insurance Journal*, November 28, 2016, <http://www.insurancejournal.com/news/international/2016/11/28/433226.htm>.

²⁵⁸ Rachel Stone and Thomas Mason, "Some Insurtech Firms Win Funds from Incumbents, While Some Go It Alone," *S&P Global Market Intelligence*, December 20, 2017, <https://platform.mi.spglobal.com/web/client?auth=inherit#news/article?id=42930472>.

²⁵⁹ See, e.g., "Blockchain Technology," NAIC and CIPR, last updated December 13, 2017, http://www.naic.org/cipr_topics/topic_blockchain.htm; Hannah Murphy and Philip Stafford, "Blockchain Explainer: A Revolution Only In Its Infancy," *Financial Times*, February 1, 2018, <https://www.ft.com/content/6c707162-ffb1-11e7-9650-9c0ad2d7c5b5>.

²⁶⁰ B3i, "B3i Development and Priorities" (presentation, FACI, Washington, DC, May 10, 2018), https://www.treasury.gov/initiatives/fio/Documents/May2018FACI_B3i.pdf.

²⁶¹ B3i was formed in 2016 as a collaboration of 15 insurers and reinsurers to "explore the potential of using Distributed Ledger Technologies within the industry for the benefit of all stakeholders in the value chain." B3i became a legal entity in March 2018 with its own capital and intellectual property, in order to "streamline the development, testing, and commercialisation of blockchain solutions." "B3i: About Us," B3i, <https://b3i.tech/about-us.html>.

²⁶² The RiskBlock Alliance is a blockchain consortium that has 30 members, including national and international insurers, reinsurers, agencies, and brokerages. The Institutes, "The Institutes RiskBlock Alliance Adds 12 New Risk Management & Insurance Corporate Members, Bringing Total to 30," news release, August 14, 2018, <https://www.theinstitutes.org/about-us/media-center/articles/institutes-riskblocktm-alliance-adds-12-new-risk-management-insurance>.

²⁶³ KPMG, *Enabling the Future of Underwriting: A Digital Roadmap* (June 1, 2017), 5-7, <https://assets.kpmg.com/content/dam/kpmg/us/pdf/2017/05/enabling-the-future-of-underwriting.pdf>.

Despite these innovations, some observers believe that insurers still have a long road ahead. Industry surveys suggest that the industry “lags behind other industries when it comes to technological innovation” and that “companies are thus focusing on four areas they consider to be most in need of technological improvement: customer experience; legacy administrative and claims systems; data aggregation and mining; and underwriting systems.”²⁶⁴ Another survey found that “the extent to which [insurers] have leveraged data, to date, is minor in comparison with what the IoT will bring.”²⁶⁵

2. Regulatory Responses to InsurTech

State, federal, and international regulators and policymakers continue to work to address InsurTech and its implications for the insurance industry and insurance regulation. Most recently, Treasury examined InsurTech and other fintech issues in the Fintech EO Report, described above. InsurTech and related issues also have been the subject of several FOCI meetings.

At the state and local level, the private and public sectors are coming together to foster start-ups and create InsurTech “hubs.”²⁶⁶ The NAIC is aiming to adopt technologies such as cloud capabilities which would “enable the organization to explore opportunities with big data.”²⁶⁷ The NAIC is also researching resources needed to assist states in their review of complex predictive models used in rate filings.²⁶⁸ In addition, the NAIC’s Innovation and Technology Task Force continues to provide a “forum for the discussion of innovation and technology developments in the insurance sector,”²⁶⁹ including discussion of a potential state-based regulatory sandbox.²⁷⁰ The nonprofit advisory organization American Association of Insurance

²⁶⁴ “Insurers ‘remain at the initial stage of data maturity’: A.M. Best,” *Reinsurance News*, March 19, 2018, <https://www.reinsurancene.ws/insurers-remain-intial-stage-data-maturity-m-best/>.

²⁶⁵ LexisNexis Risk Solutions, *Are You Prepared for the Insurance Data Tsunami? Challenges and Opportunities from the Internet of Things* (March 2018), <http://solutions.lexisnexis.com/97109confirmation>.

²⁶⁶ See, e.g., City of Hartford, “Hartford: The Next InsurTech Capital” (presentation, FOCI, Washington, DC, May 10, 2018), https://www.treasury.gov/initiatives/fio/Documents/May2018FOCI_Hartford.pdf.

²⁶⁷ NAIC, *State Ahead: Strategic Plan 2018 2019 2020* (2018), 14 https://www.naic.org/documents/state_ahead_strategic_plan.pdf.

²⁶⁸ See, e.g., Thomas Harman, “NAIC to Look Into Resources Needed to Help States Review Predictive Models,” *Best’s News Service*, April 18, 2018, <http://www3.ambest.com/ambv/bestnews/newscontent.aspx?AltSrc=104&RefNum=207863>.

²⁶⁹ “Innovation and Technology Task Force,” NAIC, https://www.naic.org/cmte_ex_itf.htm.

²⁷⁰ American Insurance Association, “Update on the AIA’s Innovation Initiative & Design Principles for U.S. State-Based Regulatory Sandbox” (presentation, NAIC, Milwaukee, WI March 26, 2018), https://www.naic.org/meetings1803/cmte_ex_itf_2018_spring_nm_aia_pres.pdf.

Services announced, in August 2018, the introduction of an open Insurance Data Link (openIDL), a pilot blockchain platform to help automate insurance regulatory reporting.²⁷¹

Insurance and other financial regulators around the world continue to open and operate regulatory “sandboxes,” which allow firms to test innovative products and business models without being subject to all of the usual legal and regulatory requirements. The United Kingdom’s Financial Conduct Authority (FCA) launched a sandbox in June 2016 “to test innovative products, services or business models in a live market environment, while ensuring that appropriate protections are in place.”²⁷² By October 2017, the FCA sandbox had supported 50 firms selected from 146 applications.²⁷³ In September 2017, the Hong Kong Insurance Authority launched a regulatory sandbox and a licensing “fast track” in order to increase Hong Kong’s appeal as a Fintech hub in the region.²⁷⁴

U.S. insurers continue to advocate for improvements in 21st century insurance regulation, beyond regulatory sandboxes, including a framework in which:

- all states permit electronic delivery of policyholder notices and insurance coverage confirmation;
- all information is available electronically;
- blockchain (or other secure technology) is used;
- a streamlined rate and form filing process is available;
- mutual recognition is established between state regulators; and
- use of big data is recognized and trusted for policy underwriting.²⁷⁵

²⁷¹ American Association of Insurance Services, “AAIS Collaborates with IBM to Transform Insurance Regulatory Reporting Using Blockchain,” news release, August 15, 2018, <https://www.aaionline.com/web/guest/aa-is-collaborates-with-ibm-to-transform-insurance-regulatory-reporting-using-blockchain>.

²⁷² “Regulatory Sandbox Lessons Learned Report,” FCA, last updated October 20, 2017, <https://www.fca.org.uk/publications/research/regulatory-sandbox-lessons-learned-report>.

²⁷³ FCA, *Regulatory Sandbox Lessons Learned Report* (October 2017), <https://www.fca.org.uk/publication/research-and-data/regulatory-sandbox-lessons-learned-report.pdf>.

²⁷⁴ See Kate Smith, “Insurance Authority Exec: Insurtech a High Priority for Hong Kong Regulator,” *Best’s News Service*, October 9, 2017, <http://www3.ambest.com/ambv/bestnews/newscontent.aspx?AltSrc=104&RefNum=203642>.

²⁷⁵ Chubb, “NAIC Innovation and Technology Task Force Meeting” (presentation, NAIC, Milwaukee, WI, March 26, 2018), https://www.naic.org/meetings1803/cmt_e_ex_itf_2018_spring_nm_chubb_pres.pdf.

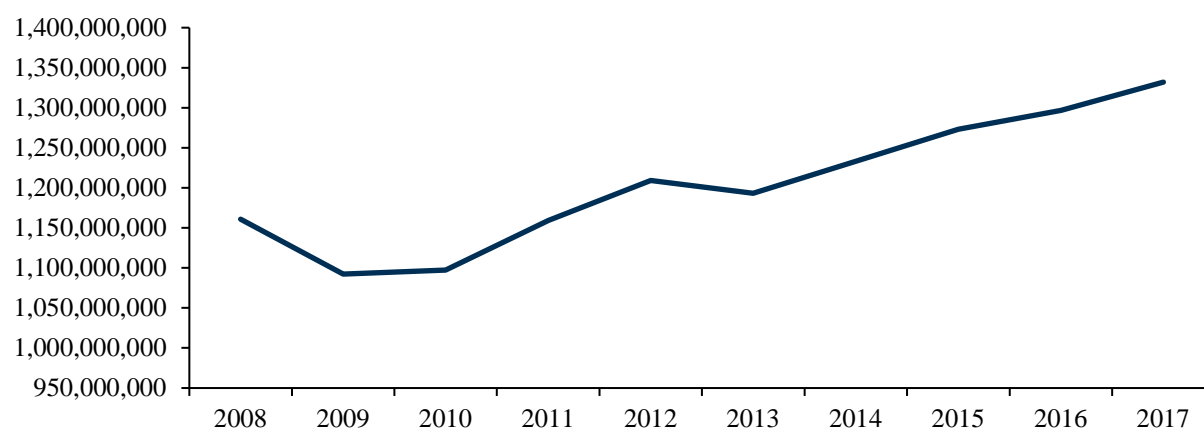
VI. INSURANCE INDUSTRY FINANCIAL OVERVIEW

A. Domestic Insurance Marketplace Overview

Ten years have passed since the misalignment of pricing relative to risk by market participants led to the financial crisis in 2008. For insurers, the financial trends over the past decade have shown an industry characterized by enhanced capital bases, improved financial flexibility, continued profitability, and steady liquidity levels. Reduced leverage has strengthened insurers' balance sheets, while operating ratios have rebounded from a negative return on average equity for the life and health insurance (L&H) sector and a return on average equity of less than one percent for the property and casualty (P&C) sector.

In 2017, total direct premiums written for the combined L&H and P&C sectors were \$1.33 trillion, growing by nearly three percent over 2016 levels and close to 15 percent from 2008, as shown in Figure 3.²⁷⁶

Figure 3: Total Direct Premiums Written for L&H and P&C Sectors
(\$ thousands)



Source: S&P Global

While the financial health of both sectors has generally been sound, there are signs of some weakening. In the last three years, the L&H sector has been experiencing negative net premium growth, while for the P&C sector, underwriting performance has been on a downward trajectory

²⁷⁶ Except as otherwise indicated, data cited in this section of the Report are as of December 31, 2017, as derived from S&P Global Market Intelligence (S&P Global) on May 1, 2018. These data are on a statutory accounting basis. S&P Global continuously updates its data for corrections in filings; 2016 data in this Report are based on updated data available as of May 1, 2017, and thus may be different in some respects from corresponding figures reported in FIO's 2017 Annual Report. Due to certain conventions used by S&P Global for aggregation of industry data, some columns in the accompanying tables may not sum to the totals that have been separately accumulated by S&P Global from individual legal entity data. Also, some figures may not add to 100 percent due to rounding.

since 2013, resulting in a combined ratio²⁷⁷ in excess of 100 in 2016 and 2017 that significantly contributed to lowering net income in those years.

1. Financial Performance and Condition

This section focuses on the financial performance and condition of the 743 L&H insurers, the 2,620 P&C insurers, and the 1,130 health insurers licensed in the United States.²⁷⁸ Insurers in the L&H sector offer products in two segments: (1) life insurance and annuities, which generally protect against the risk of financial loss associated with an individual's death and provide income streams for retirement, respectively; and (2) accident and health (A&H) products, which cover expenses for health and long-term care or provide income in the event of disability. Insurers in the P&C sector offer products that generally protect against the risk of financial loss associated with damage to property or exposure to liability for individuals and families (personal lines) or for businesses (commercial lines).

Net premiums written for the L&H sector were approximately \$597 billion in 2017, or 33 percent of net premiums written for the combined L&H, P&C, and Health sectors.²⁷⁹ For the P&C sector, net premiums written were approximately \$557 billion, or 31 percent of net premiums written for the combined L&H, P&C, and Health sectors. The Health sector reported \$664 billion of net premiums written for 2017, or 36.5 percent of the combined total for the three sectors.

At the end of 2017, the L&H sector held approximately \$7.0 trillion of total assets (including \$2.7 trillion held in separate accounts), the P&C sector held approximately \$2.0 trillion, and the Health sector held approximately \$404 billion. Capital and surplus in the L&H sector stood at approximately \$395 billion as of December 31, 2017, the P&C sector reported policyholder surplus of approximately \$764 billion, and the Health sector reported approximately \$183 billion.

Figures 4 and 5 present snapshots of the L&H sector market, showing the ten largest L&H insurance groups measured by direct premiums written, and market share for life insurance (including annuities and other deposit-type contracts) and for A&H lines of business, respectively. Premiums shown in Figures 4 and 5 aggregate all L&H sector products and all geographies of the United States.

²⁷⁷ The combined ratio is an accepted metric used to compare underwriting performance in the P&C sector; it is the sum of the loss ratio (incurred loss divided by earned premiums), the expense ratio (incurred expenses divided by premiums written), and the dividend ratio (policyholder dividends divided by earned premiums).

²⁷⁸ A.M. Best Aggregates and Averages (2018 Editions) and S&P Global. The L&H and P&C sectors are the primary insurance sectors in the United States. The Health sector includes companies licensed solely as health insurers or as Health Maintenance Organizations, but is not the focus of the remainder of this Report.

²⁷⁹ Net premiums written means direct premiums written less net ceded reinsurance premiums.

**Figure 4: L&H Insurance Groups by 2017 U.S. Life Insurance Lines
Direct Premiums Written**

2016 Rank	2017 Rank	Insurance Group	2016 Direct Premiums Written (\$000)	Share of Total (%)	2017 Direct Premiums Written (\$000)	Share of Total (%)
1	1	MetLife Inc.	\$ 81,351,380	13.01	\$ 86,621,636	13.57
2	2	Prudential Financial Inc.	45,902,327	7.34	47,465,693	7.44
3	3	New York Life Insurance Co.	30,922,462	4.95	31,852,412	4.99
4	4	Principal Financial Group Inc.	28,186,098	4.51	28,142,265	4.41
5	5	Massachusetts Mutual Life Insurance Co.	23,458,883	3.75	24,735,091	3.88
7	6	Jackson National Life Insurance Co.	22,132,278	3.54	22,439,071	3.52
6	7	American International Group	22,463,202	3.59	21,465,665	3.36
9	8	Transamerica Corp.	21,068,180	3.37	21,317,714	3.34
8	9	AXA Equitable Life Insurance Co.	21,920,627	3.51	21,290,299	3.34
10	10	Lincoln National Corp.	19,441,555	3.11	20,397,394	3.20
Combined Top 10			\$ 316,846,992	50.68	\$ 325,727,240	51.05
Combined Top 25			\$ 486,154,525	78.73	\$ 498,490,823	78.11
Combined Top 100			\$ 616,891,016	98.68	\$ 629,839,323	98.66
Total U.S. Life Insurance Lines			\$ 625,198,304		\$ 638,277,888	

Source: S&P Global (includes Life Insurance (No Annuity), Annuity Considerations, Deposit-type Contracts (State Page), Other Considerations (State Page))

The data presented in Figures 4 and 5 for life and annuity business, and in the comparable figures that follow for other lines of business, are aggregated at a group level from filings made with state insurance regulators by individual legal entity insurers. For example, premiums shown for MetLife Inc. include premiums written by all of its insurance subsidiaries in the United States, but exclude business written by affiliated entities in other jurisdictions. Similarly, Jackson National Life Group is foreign-owned, and the results shown only include U.S. operations.

Over 2017, the market share rankings among the five largest writers of life insurance and annuities were unchanged. MetLife Inc. remained the largest writer of life insurance products in the United States, followed by Prudential Financial Inc., New York Life, Principal Financial Group Inc., and Massachusetts Mutual Life Insurance Company. Jackson National (sixth-largest) and American International Group (seventh-largest) exchanged places, as did Transamerica (eighth-largest) and AXA (ninth-largest). The aggregate market shares of the top ten, 25, and 100 companies were little changed compared to 2016.

Figure 5: L&H Insurance Groups by 2017 U.S. A&H Lines Direct Premiums Written

2016 Rank	2017 Rank	Insurance Group	2016 Direct Premiums Written (\$000)	Share of Total (%)	2017 Direct Premiums Written (\$000)	Share of Total (%)
1	1	UnitedHealth Group Inc.	\$ 46,669,151	26.28	\$ 52,150,831	27.64
2	2	Aetna Inc.	28,358,852	15.97	30,004,746	15.90
3	3	Cigna Corp.	15,505,890	8.73	17,771,300	9.42
4	4	Aflac Inc.	14,872,435	8.38	14,993,250	7.95
5	5	MetLife Inc.	7,211,544	4.06	7,600,969	4.03
6	6	Unum Group	5,739,627	3.23	5,887,345	3.12
7	7	Mutual of Omaha Insurance Co.	3,740,570	2.11	4,020,341	2.13
8	8	Guardian Life Insurance Co. of America	3,629,131	2.04	3,758,560	1.99
9	9	Genworth Financial Inc.	2,676,522	1.51	2,653,016	1.41
12	10	Reliance Standard Life Insurance Co.	1,923,626	1.08	1,977,031	1.05
Combined Top 10			\$130,483,648	73.48	\$140,817,389	74.64
Combined Top 25			\$154,247,709	86.85	\$164,614,040	87.23
Combined Top 100			\$176,059,593	99.08	\$187,272,791	99.23
Total U.S. A&H Lines			\$177,559,829		\$188,701,996	

Source: S&P Global

Figure 5 shows A&H premiums written by insurers authorized to offer both life and health insurance; it excludes A&H premiums written by insurers authorized to offer only health insurance (see Figure 9 below). Thus, for example, the data presented in Figure 5 for UnitedHealth Group Inc. does not reflect that insurer's total health insurance premiums on a consolidated basis, but only premiums written by its subsidiaries licensed to offer both life and health insurance. UnitedHealth Group Inc. also writes health insurance business through subsidiaries that offer only health insurance, and those premiums are reflected in Figure 9.

There was little change in the top ten writers of A&H lines of business in 2017. United Health Group remained the largest writer of A&H lines in 2017, while Reliance Standard entered the top ten in tenth place, replacing AEGON NV.

As noted above, P&C insurers underwrite a variety of products, generally categorized as either personal lines or commercial lines. Figure 6 reports market share information on a combined P&C sector basis; details for commercial lines and personal lines market shares are provided in the discussion below.

Figure 6: P&C Insurance Groups by 2017 U.S. Combined Lines Direct Premiums Written

2016 Rank	2017 Rank	Insurance Group	2016 Direct Premiums Written (\$000)	Share of Total (%)	2017 Direct Premiums Written (\$000)	Share of Total (%)
1	1	State Farm Mutual Automobile Insurance Co.	\$ 62,189,311	10.14	\$ 64,892,583	10.13
2	2	Berkshire Hathaway Inc.	33,300,439	5.43	38,408,251	5.99
3	3	Liberty Mutual Group	32,217,215	5.25	33,831,726	5.28
4	4	Allstate Corp.	30,875,771	5.03	31,501,664	4.92
5	5	Progressive Corp.	23,951,690	3.90	27,862,882	4.35
6	6	Travelers Companies Inc.	23,918,048	3.90	24,875,076	3.88
7	7	Chubb Ltd.	20,786,847	3.39	21,208,576	3.31
10	8	United Services Automobile Association	18,213,843	2.97	20,151,368	3.14
9	9	Farmers Insurance Group of Companies	19,677,601	3.21	19,862,472	3.10
8	10	Nationwide Mutual Insurance Co.	19,756,093	3.22	19,218,907	3.00
Combined Top 10			\$ 284,886,858	46.44	\$ 301,813,505	47.10
Combined Top 25			\$ 399,153,226	65.81	\$ 417,532,247	65.16
Combined Top 100			\$ 528,266,405	86.15	\$ 553,998,163	86.49
Total U.S. P&C Sector			\$ 613,383,631		\$ 640,773,840	

Source: S&P Global (includes all lines of business)

On a combined basis (including all lines of P&C business), State Farm Mutual Automobile Insurance Company remained the largest writer of P&C business in 2017. Similarly, there was no change in the market share rankings of the remaining top seven P&C insurers. USAA rose to eighth place from tenth in 2016, replacing Nationwide Mutual Group, which dropped to tenth place from eighth in 2016.

For P&C commercial lines, there was little change among the top five writers, while Berkshire Hathaway rose to seventh place in 2017 from ninth in 2016. Among P&C personal lines writers, State Farm was again the largest, while Berkshire Hathaway rose to second place from third in 2016, swapping places with Allstate, and USAA overtook fifth place from Liberty Mutual. For both commercial lines and personal lines, there was little change in the aggregate market shares of the top 10, 25, and 100 companies in 2017.

As shown in Figure 7 below, market share rankings among the top ten health insurance groups were little changed in 2017. UnitedHealth Group continued to dominate the market, while Centene overtook Aetna for fifth place and Kaiser Foundation Health Plan Inc. overtook Independence Health Group for seventh place.

Figure 7: Health Insurance Groups by 2017 U.S. Health Lines Direct Premiums Written

2016 Rank	2017 Rank	Insurance Group	2016 Direct Premiums Written (\$000)	Share of Total (%)	2017 Direct Premiums Written (\$000)	Share of Total (%)
1	1	UnitedHealth Group Inc.	\$ 79,472,497	12.42	\$ 86,431,430	12.85
2	2	Anthem Inc.	60,809,498	9.50	65,645,632	9.76
3	3	Humana Inc.	53,553,211	8.37	53,176,602	7.90
4	4	HealthCare Services Group, Inc.	32,157,585	5.02	34,304,533	5.10
6	5	Centene Corp.	24,070,448	3.76	28,260,223	4.20
5	6	Aetna Inc.	24,414,237	3.81	20,525,502	3.05
8	7	Kaiser Foundation Health Plan Inc.	16,166,834	2.53	17,406,943	2.59
7	8	Independence Health Group Inc.	17,013,754	2.66	17,010,939	2.53
9	9	Molina Healthcare Inc.	15,317,439	2.39	16,665,219	2.48
11	10	GuideWell Mutual Holding Corp.	13,092,142	2.05	15,253,562	2.27
Combined Top 10			\$ 336,427,392	52.56	\$ 354,680,585	52.72
Combined Top 25			\$ 461,627,586	72.12	\$ 486,588,241	72.33
Combined Top 100			\$ 611,127,522	95.48	\$ 641,581,917	95.37
Total U.S. Life Insurance Lines			\$ 640,073,026		\$ 672,699,981	

Source: S&P Global

2. Life and Health Sector

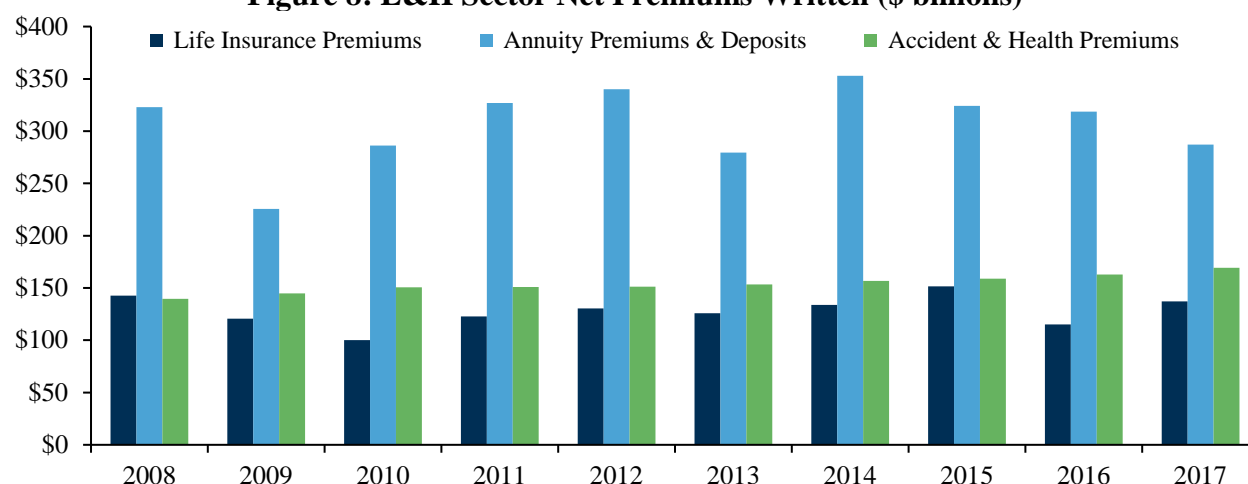
a) Performance

This section presents additional analysis of the financial performance of the L&H sector in 2017, and then assesses the L&H sector's overall financial condition as of December 31, 2017.

(1) Net Premiums Written

Net premiums written is a principal measure of the size and growth of the insurance industry. Net premiums written accounted for 71 percent of total L&H sector revenues, a level slightly lower than the ten-year historical average. In 2017, L&H sector net premiums written were \$597 billion, marking a less than one percent decrease from the \$600 billion reported in 2016, but also the third consecutive year of negative growth. A ten percent decrease in annuity premiums and deposits was not fully offset by a 19 percent rebound in life insurance premiums and a four percent increase in accident and health premiums. A number of large reinsurance transactions in 2017 by Prudential Financial, Inc., MetLife, Inc., Transamerica Life Insurance Company, and Forethought Life Insurance Company were cited as the main cause of the drop in net premiums.²⁸⁰ In 2017, annuity premiums and deposits represented 48 percent of total net premiums written, a decrease from the 53 percent reported in 2016, as shown in Figures 8 and 9. Sales of traditional life insurance products rose to make up 23 percent of 2017 L&H sector net premiums written from 19 percent in 2016, while the remainder was virtually comprised entirely of A&H sector premiums.

²⁸⁰ Matthew Coppola, *Best's Special Report: First Look-2017 US Life/Health Financial Results* (March 16, 2018), http://www3.ambest.com/ambv/sales/bwpurchase.aspx?altsrc=108&record_code=271766.

Figure 8: L&H Sector Net Premiums Written (\$ billions)

Source: S&P Global

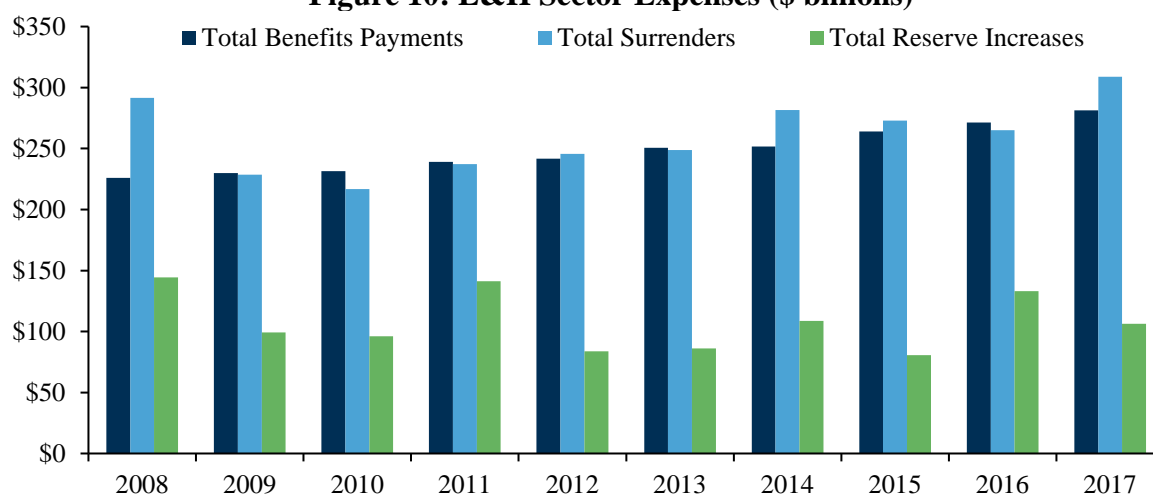
Figure 9: L&H Sector Net Premiums, Considerations, and Deposits (\$ thousands)

	2013	2014	2015	2016	2017
Life Insurance Premiums	\$ 125,958,925	\$ 133,902,121	\$ 151,399,614	\$ 115,034,733	\$ 137,129,172
Annuity Premiums & Deposits	279,434,360	352,823,672	324,041,791	318,539,213	287,201,782
A&H Premiums	153,284,525	156,605,802	158,826,518	162,860,367	169,245,905
Credit Life & Credit A&H Premiums	1,445,214	1,388,591	1,379,933	1,261,511	1,248,910
Other Premiums & Considerations	2,345,600	2,554,797	2,497,634	2,192,329	2,097,658
Total	\$ 562,565,306	\$ 647,274,984	\$ 638,191,067	\$ 599,888,152	\$ 596,923,435
Share of Total	2013	2014	2015	2016	2017
Life Insurance Premiums	22%	21%	24%	19%	23%
Annuity Premiums & Deposits	50%	55%	51%	53%	48%
A&H Premiums	27%	24%	25%	27%	28%
Credit and Other	1%	1%	1%	1%	1%
	100%	100%	100%	100%	100%

Source: S&P Global

(2) Policyholder Contract Benefits, Surrenders, and Other Expenses

Policyholder contract benefits are claims or obligations of L&H insurers under life insurance, annuity, and other contracts and policies. Contract surrenders occur when a policyholder or contract holder elects to cancel a policy or contract before the end of its contractual term and to receive its accumulated cash value. Contract benefit payments and contract surrenders comprise the majority of total expenses for L&H insurers. Non-benefit-related expenses include general administrative and overhead expenses, expenses incurred in acquiring business (particularly producer commissions), and expenses related to payments made under contractual provisions of policies, including loss verification and adjustment expenses. Figures 10 and 11 show aggregate L&H sector benefit payments, surrenders, reserve increases, and all other expenses for recent years.

Figure 10: L&H Sector Expenses (\$ billions)

Source: S&P Global

Figure 11: L&H Sector Expenses (\$ thousands)

	2013	2014	2015	2016	2017
Total Benefits Payments	\$ 250,633,002	\$ 251,752,460	\$ 263,910,125	\$ 271,379,800	\$ 281,296,458
Total Surrenders	248,702,088	281,532,892	272,998,652	265,095,216	308,902,292
Total Increase in Reserves	86,224,076	108,734,429	80,546,645	133,139,152	106,346,757
Total Transfers to Separate Accounts	(771,523)	(16,464,689)	36,922,715	(38,046,582)	(65,751,424)
Commissions	53,014,166	52,063,514	55,501,271	64,569,464	57,989,814
General & Administrative Expenses	58,463,296	58,950,563	60,074,097	62,361,334	65,817,079
Insurance Taxes, Licenses and Fees	8,193,402	9,981,158	10,481,379	10,828,070	8,811,447
Other Expenses	(187,933)	65,993,619	(4,916,529)	(2,712,465)	(4,300,494)
Total	\$ 704,270,574	\$ 812,543,945	\$ 775,518,356	\$ 766,613,988	\$ 759,111,928

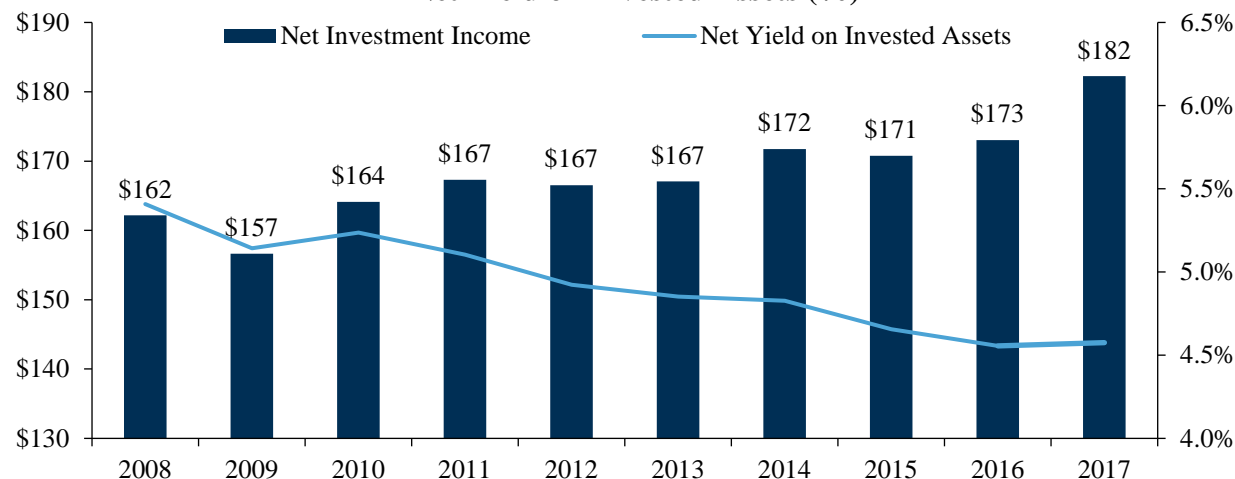
Source: S&P Global

Total L&H sector expenses decreased by slightly less than one percent in 2017. Total contract surrenders increased 17 percent in 2017, while total benefits payments rose four percent; these increases were more than offset by the combination of a 20 percent drop in reserve increases, a 73 percent increase in the net amount transferred from separate accounts, and a ten percent decrease in commissions expense.

(3) Investment Income

Net investment income represented about 22 percent of aggregate L&H sector revenues in 2017, the highest level recorded over the past ten years, in part due to a slightly more than five percent increase for the year. Figures 12 and 13 show L&H sector net investment income from invested assets (excluding net realized gains and losses on the disposition of assets) and the net investment yield for recent years.

Figure 12: L&H Sector Annual Net Investment Income (\$ billions) and Net Yield on Invested Assets (%)



Source: S&P Global

Figure 13: L&H Sector Annual Net Investment Income (\$ billions) and Net Yield on Invested Assets (%)

	2013	2014	2015	2016	2017
Net Investment Income	\$ 167,085,528	\$ 171,733,049	\$ 170,760,967	\$ 173,025,713	\$ 182,241,780
Total Cash & Investments	3,482,338,468	3,631,569,037	3,703,872,525	3,891,873,165	4,074,049,889
Net Yield on Invested Assets	4.85%	4.83%	4.66%	4.56%	4.58%

Source: S&P Global

Longer-term interest rates remained relatively flat over 2017, albeit at higher average levels compared to 2016 (see Figure 14); this contributed to the first, small increase in the net yield on invested assets since 2010. Additionally, the 5.3 percent gain in net investment income outpaced the growth in total cash and invested assets in 2017, which was slightly less than five percent. Net yield on invested assets was reported at 4.58 percent in 2017, versus the 4.56 percent recorded in 2016. Nonetheless, the general interest rate environment remained near historically low levels, and continued to present risks to the L&H sector.²⁸¹ A more detailed discussion of these risks can be found in Section VI.D of this Report.

²⁸¹ See also FIO, 2017 Annual Report, 11.

Figure 14: Percentage Yield on 10-Year Treasury Bonds

Source: S&P Global

In 2017, the L&H sector recorded net realized capital losses of \$8.6 billion, 25 percent less than the \$11.4 billion in realized capital losses reported in 2016; the improvement was due to higher realized gains on bonds and unaffiliated equities. Losses on derivative securities (almost exclusively used for hedging transactions) were at approximately the same level as in 2016.

(4) Net Income and Return on Equity

Figure 15 presents a summary income statement for the L&H sector. Total revenues in the L&H sector were \$840 billion in 2017, a decrease of slightly more than one percent from the \$852 billion reported in 2016. The decrease in net premiums written (discussed above), a 48 percent increase in the reinsurance allowance, i.e. reserve adjustments on reinsurance ceded, and a 20 percent drop in “other income” were partially offset by the rise in net investment income (also discussed above) and a five percent increase in separate accounts revenue. Total expenses decreased by one percent to \$759 billion, leading to a six percent decrease in pre-tax operating income. Net income increased by nearly seven percent to exceed \$42 billion in 2017 due to the reduction in net realized capital losses.

Figure 16 shows key operating ratios for the L&H sector. The L&H sector’s 2017 pre-tax operating margin decreased slightly to 7.5 percent from 7.9 percent in 2016. Similarly, the decrease in operating income led to a drop in the sector’s pre-tax operating return on average equity to 16.3 percent from the 17.9 percent recorded in 2016; however, the gain in net income increased the 2017 return on average equity to 10.9 percent from 10.5 percent.

Figure 15: L&H Sector Net Income

	2013	2014	2015	2016	2017
Premiums, Consideration & Deposits	\$ 562,565,306	\$ 647,274,984	\$ 638,191,067	\$ 599,888,152	\$ 596,923,435
Net Investment Income	167,085,528	171,733,049	170,760,967	173,025,713	182,241,780
Reinsurance Allowance	(21,247,568)	(14,987,927)	(86,443,933)	(16,975,046)	(25,108,912)
Separate Accounts Revenue	31,425,593	34,270,975	35,197,929	34,652,744	36,551,982
<u>Other Income</u>	<u>42,834,796</u>	<u>39,700,564</u>	<u>90,478,871</u>	<u>61,314,211</u>	<u>49,007,039</u>
Total Revenue	782,663,655	877,991,645	848,184,900	851,905,776	839,615,325
Total Expenses	704,270,574	812,543,945	775,518,356	766,613,988	759,111,928
<u>Policyholder Dividends</u>	<u>15,660,306</u>	<u>16,430,515</u>	<u>18,271,884</u>	<u>18,230,320</u>	<u>17,498,496</u>
Net Gain from Operations before Tax	62,897,846	49,012,243	54,396,094	67,061,448	63,004,900
<u>Federal Income Tax</u>	<u>8,554,055</u>	<u>10,106,154</u>	<u>10,566,567</u>	<u>16,278,983</u>	<u>12,352,079</u>
Net Income before Capital Gains	54,344,234	38,905,344	43,832,635	50,782,390	50,652,821
Net Realized Capital Gains (Losses)	(12,026,143)	(1,306,441)	(3,543,569)	(11,384,838)	(8,553,525)
Net Income	\$ 42,317,305	\$ 37,605,615	\$ 40,285,063	\$ 39,397,552	\$ 42,099,297

Source: S&P Global

Figure 16: L&H Sector Operating Ratios

	2013	2014	2015	2016	2017
Pre-Tax Operating Margin	8.04%	5.58%	6.41%	7.87%	7.50%
Return on Average Equity	12.85%	10.96%	11.17%	10.54%	10.86%
Pre-Tax Operating Return On Average Equity	19.10%	14.29%	15.08%	17.93%	16.25%
Return on Average Assets	0.73%	0.61%	0.64%	0.61%	0.62%

Source: S&P Global

b) Condition

This section presents information on the 2017 financial condition of the L&H sector, highlighting common industry metrics associated with solvency and financial stability. It describes the elements that have characterized the financial health of the L&H sector over the last decade and in the post-crisis period.²⁸²

(1) Capital and Surplus

Figure 17 shows the financial condition of the L&H sector as reflected by asset growth and the sector's capital and surplus position.

Figure 17: L&H Sector Capital Position (\$ thousands)

	2013	2014	2015	2016	2017
Capital & Surplus	\$ 331,982,056	\$ 353,968,597	\$ 367,249,564	\$ 380,686,099	\$ 394,528,734
Y-Y Growth	1.6%	6.6%	3.8%	3.7%	3.6%
General Account Assets	\$3,675,915,856	3,835,978,902	3,912,020,651	4,117,531,087	4,300,414,526
Y-Y Growth	2.5%	4.4%	2.0%	5.3%	4.4%
General Account Assets, Adjusted ²⁸³	\$3,643,772,397	3,800,613,082	3,867,609,793	4,073,744,432	4,230,419,207
Capital & Surplus to General Account Adjusted Assets	9.11%	9.31%	9.50%	9.34%	9.33%

Source: S&P Global

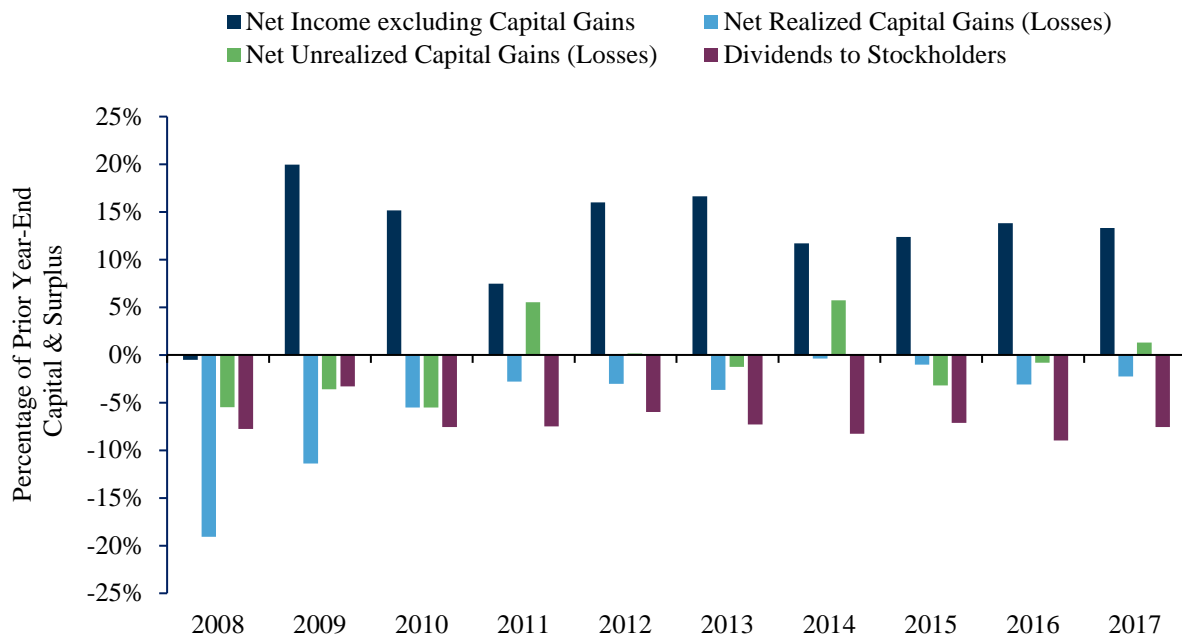
The L&H insurance sector continued to enhance its capital and surplus position in 2017, with year-over-year growth of 3.6 percent to \$394.5 billion, contributing to an average annual growth rate of 4.1 percent over the last 10 years. Underlying that improvement has been steady annual growth in general account assets.

As Figure 17 indicates, the ratio of capital and surplus to general account adjusted assets averaged 9.32 percent annually over the last five years. By comparison, the same ratio averaged 8.89 percent annually from 2008 to 2012, resulting in a decade average of about 9.1 percent on a yearly basis and demonstrating that in recent years, the L&H sector has enhanced the capital levels it maintains to support the risk exposure of the assets backing its obligations.

The L&H insurance sector's capital position can largely be attributable to sustained positive earnings. Figure 18 shows key contributors to the L&H sector's capital and surplus.

²⁸² According to the National Bureau of Economic Research, the financial crisis began in December 2007 and lasted until June 2009. See "U.S. Business Cycle Expansions and Contractions," National Bureau of Economic Research, <http://nber.org/cycles/>. The post-crisis period noted throughout this section refers to the period, beginning at year-end 2009 through 2017 and calculations cited for the post-crisis period are based on this time frame.

²⁸³ General Account adjusted assets refers to total general account assets less cash and cash equivalents, as such holdings pose little risk to the insurer.

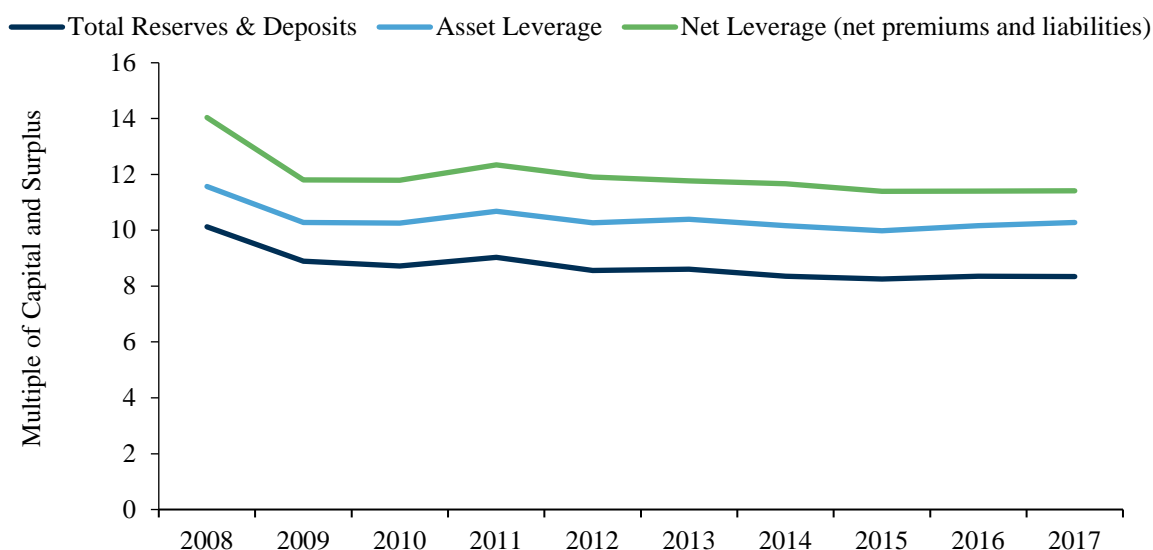
Figure 18: Key Contributors to L&H Sector Capital and Surplus

Source: S&P Global

Growth in the L&H sector's capital base can be observed more clearly by eliminating the effect of capital contributions in the form of surplus notes. Organic growth in capital and surplus has averaged 3.9 percent annually in the last decade, mainly due to consistently strong underwriting results that have boosted net income.²⁸⁴ Partially offsetting that growth have been stockholder dividends. In 2017, stockholder dividends were \$28.8 billion, dropping from a 10-year high of \$32.9 billion at year-end 2016. Though diminishing the sector's potential level of capitalization to some degree, stockholder dividends have comprised only 7.1 percent of prior year-end capital and surplus on average annually in the last 10 years.

Insurers balance two goals: (1) returning a profit by investing the premiums received from underwriting activities; and (2) limiting the risk exposure created by the policies that insurers underwrite. Insurers may cede premiums to reinsurance companies in order to move some of the risks off of their balance sheets. Since the end of the financial crisis, on-balance sheet leverage has remained stable, lending to the strength of the L&H sector's capital position. While an uptick was observed in the asset leverage ratio for 2017 from the prior year, primarily due to increased investment holdings, Figure 19 shows that general account leverage for the L&H sector has held steady overall in the post-2008 period.

²⁸⁴ Capital and surplus, less surplus notes, decreased by 7.3 percent at year-end 2008, the only year in the last decade to have experienced a drop. When eliminating 2008, organic growth in capital and surplus averaged 5.2 percent annually from 2009 through 2017.

Figure 19: On-Balance Sheet General Account Leverage for the L&H Sector

Source: S&P Global

The L&H sector's net leverage ratio²⁸⁵ of 11.42 at year-end 2017 was not materially changed from the previous two years and continued to remain below the average of about 11.72 per year post-2008.²⁸⁶ Specifically, the liabilities-to-equity multiple of 9.91 at year-end 2017, reflecting general account liabilities of \$3.9 trillion as a multiple of capital and surplus, was slightly up from 9.82 at year-end 2016 and has averaged at a multiple of almost 10 annually in the past nine years. Net premiums, annuities, and considerations (collectively referred to as net premiums in the net leverage ratio) have averaged 1.75 times capital and surplus per year post-crisis. Surplus relief through reinsurance for the L&H sector has been on a gradual ascent since 2014, rising to 5.22 percent at year-end 2017 from 5.0 percent at year-end 2016 and from 4.4 percent and 3.72 percent at the years ending 2015 and 2014, respectively.²⁸⁷ Cessions to reinsurers accounted for 27 percent of gross premiums at year-end 2017, climbing from 24.7 percent at year-end 2016 and surpassing the post-crisis annual average of 21.8 percent for the decade.

Exhibiting an annual growth rate of 3.1 percent on average since year-end 2008, total policy reserves and deposit-type contract reserves were \$3.3 trillion at year-end 2017, up by 3.5 percent from \$3.2 trillion at year-end 2016. The multiple of policy reserves and deposits to capital and

²⁸⁵ Net leverage ratio is an indicator of the sector's exposure to pricing and estimation errors, determined by calculating total liabilities and net premiums, annuities, and considerations as a multiple of capital and surplus.

²⁸⁶ The annual average calculation of 11.7 covers 2009 through 2017, excluding the impact of the financial crisis and any potential skewing that could result with the inclusion of 2008 numbers.

²⁸⁷ The use of reinsurance for surplus relief is most common when an insurer begins to rapidly expand its volume of premiums written. The calculation in this Report involves the amount of surplus not yet reported as income from commissions and expense allowance on reinsurance ceded during the current year as a share of capital and surplus. It captures the amounts related to A&H business as well as life and annuity business for general and separate accounts. See generally FIO, *The Breadth and Scope of the Global Reinsurance Market and the Critical Role Such Market Plays in Supporting Insurance in the United States* (December 2014), <https://www.treasury.gov/initiatives/fio/reports-and-notice/Document/FIO%20-Reinsurance%20Report.pdf>.

surplus, however, has held firm, standing at 8.35 and 8.36 for the years ending 2017 and 2016, respectively, declining from a 10-year high of 10.13 at year-end 2008 when capital and surplus declined by 5.7 percent and policy reserves and deposits rose by 5.3 percent.

The asset leverage ratio aims at measuring the potential impact on the balance sheet arising from the volatility and credit quality of the sector's investment portfolio, reinsurance recoverables, and agents' balances, and is calculated as the sum of cash and invested assets plus reinsurance recoverables and agents' balances to capital and surplus. In the past decade, the L&H sector's asset leverage multiple has ranged between a low of 10.26 at year-end 2015 and a high of 12.15 at year-end 2008 when risk exposures were at their height compared to subsequent years. When removing the 2008 outlier, the peak falls to 10.99 and averages out to 10.58 percent annually, suggesting that no substantial deviations have occurred in the sector's exposure to investment, interest rate, and credit risks over the post-crisis period.

(2) Asset Base

Underlying the resilience of the L&H sector's capital position have been positive asset growth and investment allocations consistent with policyholder obligations.²⁸⁸ Total L&H insurance sector assets, including separate accounts, were \$7.0 trillion and \$6.6 trillion for the years ending 2017 and 2016, respectively, growing annually by 4.9 percent on average post-crisis. The annual growth rate of separate account assets has exceeded that of general account assets over the post-crisis period, averaging 8.1 percent versus 3.4 percent.

Figure 20 shows the composition of the L&H sector's asset portfolio and distribution of cash and investments. Of total asset holdings, general account assets have continued to exceed 61 percent of the portfolio in each of the last five years, while separate account assets have made up the remainder.

²⁸⁸ Growth in total assets declined by 8.8 percent in 2008 from the prior year, due to a considerable drop in separate account asset growth of nearly 28 percent. General account assets, however, showed positive growth in 2008.

Figure 20: Composition of L&H Sector General Account Asset and Investment Portfolio

	2013	2014	2015	2016	2017
General Account Assets / Total Assets	61.2%	61.3%	61.8%	62.3%	61.3%
Separate Account Assets / Total Assets	38.8%	38.7%	38.2%	37.7%	38.7%
Bonds	74.7%	73.9%	73.8%	73.5%	73.0%
Preferred Stocks	0.2%	0.3%	0.3%	0.2%	0.3%
Common Stocks	2.1%	2.1%	2.0%	2.2%	2.3%
Mortgage Loans	10.1%	10.3%	10.9%	11.2%	11.7%
Real Estate	0.6%	0.6%	0.6%	0.6%	0.6%
Contract Loans	3.7%	3.6%	3.4%	3.3%	3.2%
Derivatives	1.1%	1.6%	1.5%	1.6%	1.4%
Cash & Short Term Investments	2.7%	2.8%	2.8%	2.6%	2.6%
Other Investments	4.7%	4.9%	4.7%	4.7%	5.0%
Total Cash & Invested Assets	100%	100%	100%	100%	100%
Share of General Account Assets	94.7%	94.7%	94.7%	94.5%	94.7%

Source: S&P Global

The structure of the investment portfolio has remained generally consistent for the last ten years. Cash and invested assets continued to account for nearly 95 percent of the general account asset portfolio at year-end 2017, aligned with the yearly trend since 2008 and, as Figure 20 reflects, for recent years. Approximately three-quarters of the L&H sector's investment portfolio has consisted of bond holdings on average in each of the last ten years, reflective of the significant role that life insurers play in the corporate bond market. Of total bonds, almost 97 percent have invariably been long-term – in line with the long-term nature of obligations assumed under life policies and contracts. This concentration is indicative of insurer risk management practices that match asset and liability durations with the aim of mitigating the impact of interest rate fluctuations on capital and surplus and providing the ability to estimate cash flows in order to meet debt and policyholder obligations as they fall due.

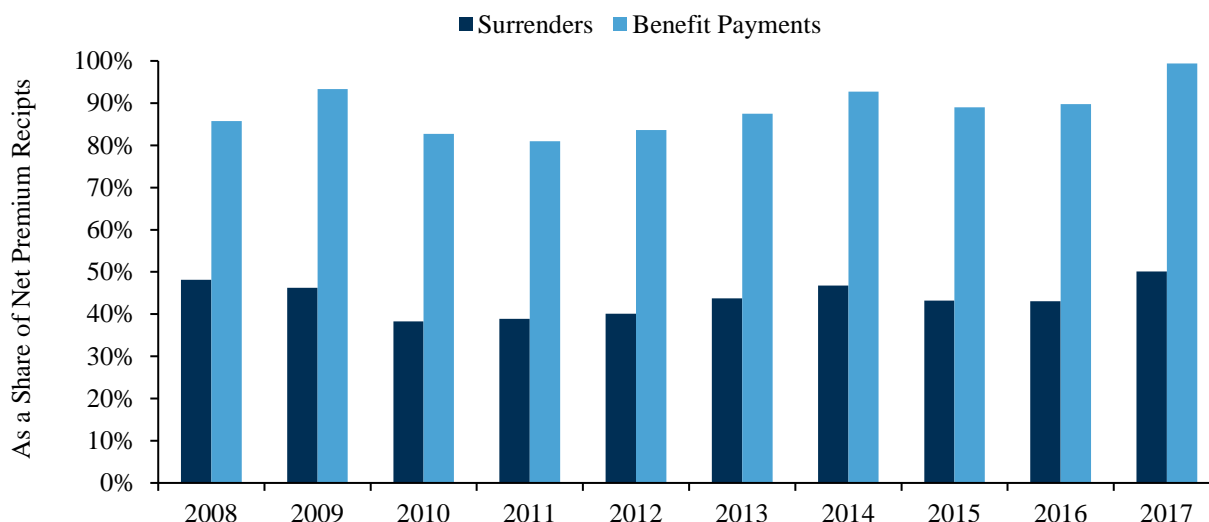
Mortgage loans remain the second largest investment class held by the L&H sector, averaging 10.5 percent of cash and invested assets annually over the last decade.

While Figure 20 captures the details for the past five years, bond investments as a share of the L&H investment portfolio have actually decreased by nearly three percentage points to 73.0 percent of cash and invested assets at year-end 2017 from a high of 75.8 percent at year-end 2010. At the same time, the L&H sector raised its holdings of mortgage loans by more than two percentage points. This reallocation may be indicative of the L&H sector's search for yield in an attempt to mitigate the effects of a low interest rate environment, which began post-crisis, on investment earnings.

(3) Liquidity

The L&H sector's sound financial health is further evidenced by the solidity of its liquidity position. Although surrender levels peaked in 2017 when reviewing the past decade, consistently positive cash flows from operations, steady growth in cash and invested assets, and a stable current liquidity ratio suggest that the L&H sector continues to possess the capacity to fulfill its ongoing business needs, as illustrated by Figure 21.

Figure 21: Cash Flows from Operations for the L&H Sector



Source: S&P Global

Benefit payments were \$612.6 billion in 2017, comprising more than 99 percent of premium receipts, net of reinsurance, up from \$553.2 billion and about 90 percent in 2016. On average, benefit payments have consumed 88 percent of net premiums collected on an annual basis over the past decade. As Figure 21 demonstrates, surrender levels remained below one-half of net premium receipts from 2008 to 2016. In 2017, surrenders reached 50 percent of net premiums collected – the highest in the last ten years, followed only by 48 percent in 2008. Surrenders were \$308.9 billion in 2017, a 16.5 percent increase from \$265.1 billion in 2016. By contrast, year-over-year growth in net premiums collected was considerably lower. Net premium receipts were \$616.1 billion and \$616.2 billion in 2017 and 2016, respectively.

While it remains to be seen whether 2017 is the start of a new trend, several factors could result in the continuation of increased surrender levels in the near future. These factors include expectations of higher interest earnings from other sources as the Federal Reserve seeks to contain inflationary pressures, and the December 2017 passage of the Tax Cuts and Jobs Act, which made changes that could reduce the use of life insurance as an estate protection vehicle.²⁸⁹

With an average annual growth rate of 3.3 percent over the last decade, cash and invested assets rose to \$4.1 trillion at year-end 2017 from \$3.9 trillion at year-end 2016, resulting in a ratio of

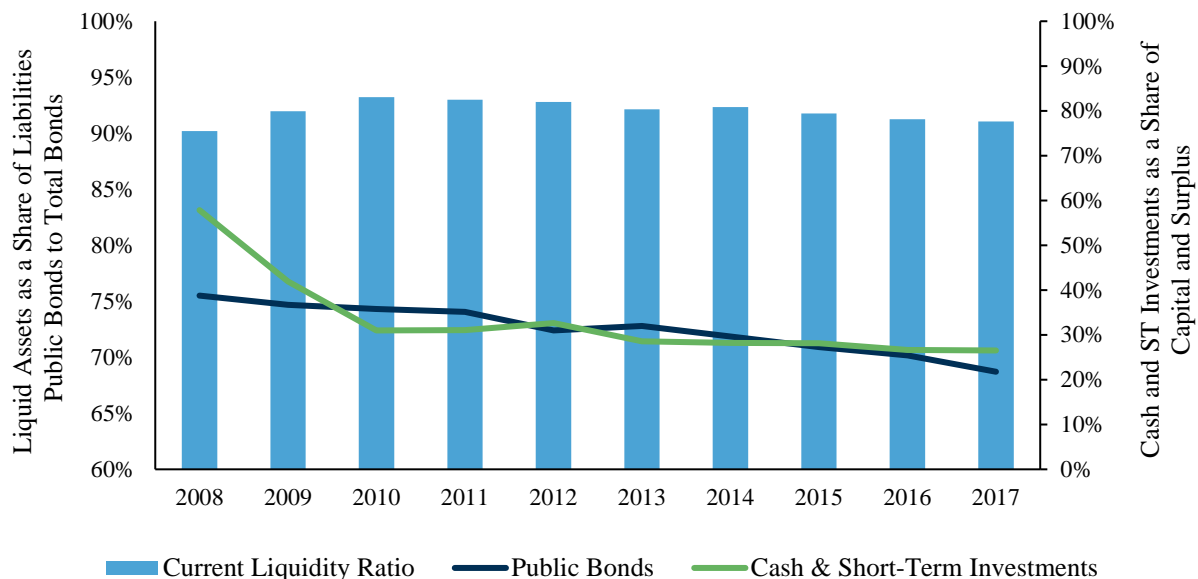
²⁸⁹ See Individual Tax Reform and Alternative Minimum Tax, Pub. L. No. 115-97, 131 Stat. 2054 (2017).

general account liabilities to cash and invested assets of 95.9 percent compared to 96.1 percent at year-end 2016 and an annual average of 96 percent for the decade. Bonds have steadily made up the bulk of cash and investments, totaling \$3.0 trillion at year-end 2017 and \$2.9 trillion at year-end 2016.

About 30 percent of the bond portfolio had maturities that ranged between five and 10 years in 2017, not materially changed from 2016. Another 38.6 percent, or \$1.2 trillion of bonds, had maturities of greater than 10 years as of year-end 2017, up slightly from 37.1 percent and \$1.1 trillion as of year-end 2016 – more than half of which consisted of bonds with maturities in excess of 20 years at both points in time. In short, at least 60 percent of the entire bond portfolio has consistently been allocated to holdings that are medium to long term in duration in each of the last 10 years, supporting the longer time horizon of a life insurer's obligations.

With a current liquidity ratio ranging between 90 percent and 93.2 percent since 2008, the L&H sector's near-term ability to satisfy liabilities has held firm.²⁹⁰ Recent emerging trends, however, may point to some potential weakening in the quality of the L&H sector's investment portfolio. As a share of capital and surplus, cash and short-term investments have continually declined from a high of 57.8 percent at year-end 2008 to 26.5 percent at year-end 2017, as illustrated in Figure 22.

Figure 22: A View of L&H Sector Liquidity



Source: S&P Global

²⁹⁰ Current liquidity is used to determine the amount of liabilities that can be covered with liquid assets. It is calculated as follows: the numerator equals net admitted cash and investments less the sum of net admitted first lien real estate loans, net admitted real estate loans less first liens, net admitted occupied properties, net admitted income generating properties, net admitted properties held for sale, affiliated long-term bonds, and affiliated preferred stock; the denominator equals total liabilities less the sum of net transfers to separate accounts due, asset valuation reserve, transfers from separate accounts, and protected cell liabilities.

Furthermore, privately-placed bonds are accounting for a greater share of total bond holdings, while public bonds have declined from a high of nearly 76 percent as of year-end 2008 to less than 69 percent as a percentage of total bond holdings as of year-end 2017. Because private-placement bonds are not assigned credit ratings, the degree of risk and whether the risk assumed is commensurate with the compensation received are difficult to ascertain. Private-placement bonds have gradually risen from a 2.2 multiple of capital and surplus at year-end 2008 to more than 2.4 at year-end 2017.

Moreover, the value of mortgage loans in foreclosure or past due by at least 90 days has been higher during the last three years compared to prior years in the past decade. These loans accounted for 0.22 percent of capital and surplus at year-end 2017 relative to 0.24 percent and 0.23 percent at years ending 2016 and 2015, respectively, climbing gradually from 0.13 at year-end 2008 and a post-crisis low of 0.08 percent at year-end 2013.

Due to the illiquid nature of affiliated holdings – i.e., a market does not exist for such types of investments, making it difficult to ascertain their value – significant growth in affiliated investments can erode the strength of an entity’s capital base. The L&H sector’s affiliated holdings of cash and invested assets have progressively mounted in the post-crisis period, averaging an annual growth rate of 7.6 percent.²⁹¹ Affiliated cash and invested assets of \$184.7 billion as of year-end 2017 represented 46.8 percent of capital and surplus, up from \$167.7 billion and 44 percent as of year-end 2016 and in sharp comparison to \$107.1 billion and 36.9 percent of capital and surplus as of year-end 2009 during the early stages of economic recovery from 2008. Affiliated investments accounted for 32 percent of common stock holdings at year-end 2017, while other investments²⁹² made up another 45.6 percent. By comparison, affiliated common stock and affiliated other investments made up 33 percent and 43.3 percent of total affiliated holdings, respectively, at year-end 2016.

These recent negative trends observed in liquidity are mitigated by the L&H sector’s overall financial profile. Specifically, publicly-traded and privately-placed bonds together have largely consisted of investment-grade bonds, averaging close to 94 percent of the entire bond portfolio annually over the past decade. The value of mortgage loans in foreclosure or past due by at least 90 days accounted for only 0.18 percent of the total value of mortgage loan holdings as of year-end 2017, down from 0.21 percent as of year-end 2016. The value of mortgage loans in good standing, on the other hand, has consistently made up more than 99 percent of the aggregate value of the L&H sector loan portfolio. Affiliated cash and investments have averaged only 3.9 percent of total cash and invested assets annually since 2008. Finally, the bulk of the unaffiliated investment holdings is aligned with the L&H sector’s asset/liability matching philosophy, with long-term bonds dominating the portfolio. Unaffiliated cash and invested assets were \$3.9 trillion at year-end 2017, up by 4.4 percent from \$3.7 trillion at year-end 2016. The ratio of unaffiliated investments to capital and surplus was a multiple of 9.9 at year-end 2017, rising slightly from 9.8 at year-end 2016, while the ratio of unaffiliated cash and invested

²⁹¹ Affiliated investments declined by nearly four percent in 2008 from the prior year, the only year in the past decade to show a reduction.

²⁹² “Other” investments include, but are not limited to, surplus notes, limited partnerships, joint ventures, hedge funds, private equity funds, and direct investments.

assets to total general account liabilities has remained at a multiple of 1 in each year of the last ten years.

3. Property and Casualty Sector

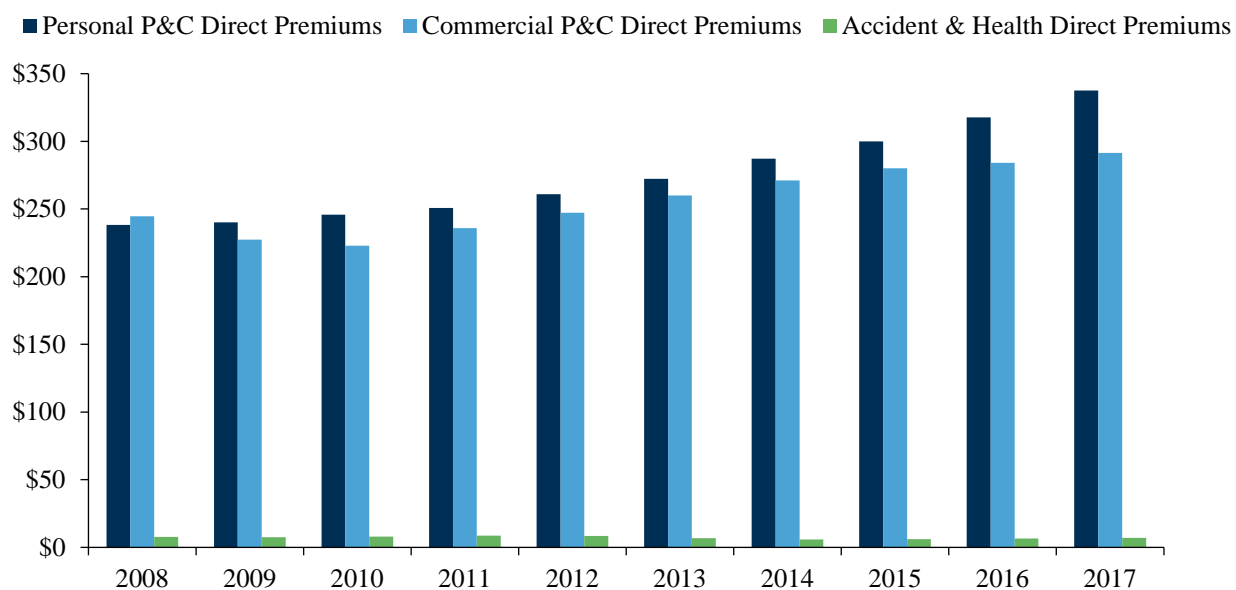
This section presents additional analysis of the financial performance of the P&C sector in 2017, and then assesses the P&C sector's overall financial condition as of December 31, 2017.

a) Performance

(1) Net Premiums Written

Figure 23 shows the level and composition of P&C sector direct premiums written by major lines of business, and Figure 24 shows the corresponding dollar values and a reconciliation to net premiums earned (i.e., direct premiums written less net reinsurance premiums ceded and the change in unearned premiums reserve). For 2017, total P&C sector net premiums written reached a record level at \$557 billion, marking a 4.4 percent increase over 2016 levels. Direct premiums written for personal lines of business grew by six percent, while direct premiums written for commercial lines of business increased by nearly three percent. Net reinsurance premiums ceded increased by five percent, but the dollar amount of this increase was small relative to the gain in personal lines premiums, and allowed for the growth in net premiums written. Economic growth in the United States and rate increases continued to drive premium growth, with private passenger and commercial auto liability showing solid premium gains.²⁹³

Figure 23: P&C Sector Direct Premiums Written (\$ billions)



Source: S&P Global

²⁹³ NAIC Financial Regulatory Services Division, *U.S. Property and Casualty and Title Insurance Industries – 2017 Full Year Results* (2018), https://www.naic.org/documents/topic_insurance_industry_snapshots_2017_property_casualty_industry_report.pdf.

Figure 24: P&C Sector Direct Premiums Written (\$ thousands)

	2013	2014	2015	2016	2017
Personal P&C Direct Premiums	\$ 272,367,335	\$ 287,272,384	\$ 300,054,135	\$ 317,762,245	\$ 337,535,767
Commercial P&C Direct Premiums	259,943,105	271,209,044	280,072,580	284,084,864	291,440,657
A&H Direct Premiums	<u>6,701,202</u>	<u>5,766,660</u>	<u>6,142,327</u>	<u>6,565,978</u>	<u>7,131,256</u>
Direct Premiums Written	546,334,118	570,782,303	591,757,789	613,383,327	640,773,840
Net Reinsurance Premiums	<u>(64,406,185)</u>	<u>(67,958,293)</u>	<u>(71,247,200)</u>	<u>(79,397,787)</u>	<u>(83,534,870)</u>
Net Premiums Written	481,927,933	502,824,010	520,510,588	533,985,541	557,238,970
Change in Unearned Premiums Reserve	9,853,047	9,093,095	8,400,547	4,801,742	12,079,515
Net Premiums Earned	\$ 472,074,886	\$ 493,730,916	\$ 512,110,041	\$ 529,183,799	\$ 545,159,455

Source: S&P Global

(2) Underwriting Results

Figure 25 shows the P&C combined ratio and its construction for the past several years.²⁹⁴ The combined ratio for the P&C sector increased significantly to approximately 103.8 percent in 2017, rising from 100.8 in 2016 and above 100 percent for the second consecutive year since 2012. A combined ratio greater than 100 percent indicates that premiums did not cover losses and expenses in a given period (i.e., underwriting operations made a negative contribution to net income). Investment income, realized capital gains/losses, and income taxes are not considered in the combined ratio. Three major Category 4 hurricanes and one Category 1 storm that hit the United States, combined with severe California wildfires, pushed catastrophe losses to near record levels in 2017 and drove the increase in the combined ratio.²⁹⁵ The expense ratio decreased slightly in 2017 compared with 2016.

Figure 25: P&C Sector Operating Ratios

	2013	2014	2015	2016	2017
Loss Ratio	55.60%	57.21%	57.48%	60.68%	64.11%
Loss Adjustment Expense Ratio	<u>11.94%</u>	<u>11.82%</u>	<u>11.83%</u>	<u>11.61%</u>	<u>11.76%</u>
Loss and Loss Adjustment Expense Ratio	67.54%	69.04%	69.31%	72.29%	75.87%
Net Commission Ratio	10.24%	10.38%	10.55%	10.41%	10.27%
Salaries & Benefits Ratio	8.54%	8.14%	8.24%	8.32%	7.91%
Tax, License & Fees Ratio	2.60%	2.51%	2.55%	2.51%	2.47%
Administrative & Other Expense Ratio	<u>6.78%</u>	<u>6.55%</u>	<u>6.72%</u>	<u>6.68%</u>	<u>6.66%</u>
Expense Ratio	28.17%	27.58%	28.05%	27.92%	27.31%
Policyholder Dividend Ratio	0.64%	0.60%	0.59%	0.56%	0.61%
Combined Ratio	96.35%	97.21%	97.95%	100.76%	103.79%

Source: S&P Global

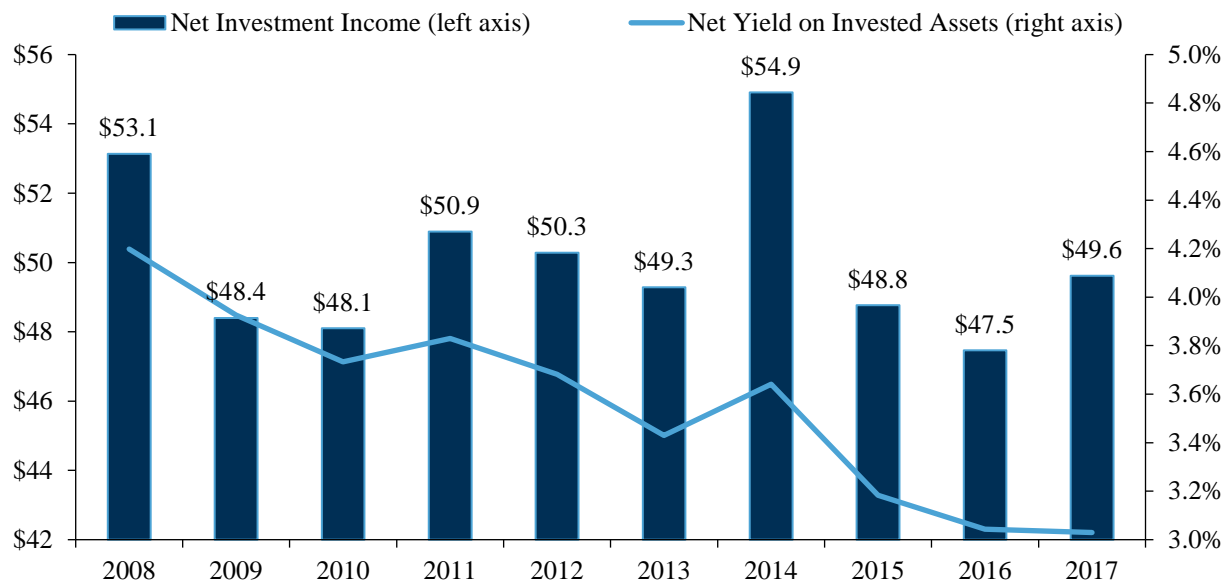
²⁹⁴ S&P Global ratios include the policyholder dividend ratio for transparency because dividends represent a cash outlay.

²⁹⁵ Matthew Coppola, *Best's Special Report: First Look – 2017 Property/Casualty Financial Results* (March 16, 2018), http://www3.ambest.com/bestweek/DisplayBinary.aspx?TY=P&record_code=271765.

(3) Investment Income

In 2017, net investment income for the P&C sector reversed its declining trend from the previous two years, increasing by over four percent to nearly \$50 billion. Nonetheless, growth of over six percent in cash and invested assets led to another, albeit very slight, decrease in the net yield on invested assets to 3.03 percent, marking the lowest level in net yield in the past ten years. Figure 26 depicts a longer-term view of the trend in net investment income and net yield on invested assets for the P&C sector, and Figure 27 provides this data for the past five years. Realized capital gains and losses are reported separately and are not a component of net investment income. As P&C insurers are less dependent than L&H insurers on net investment income to fund losses and expenses, net investment income accounted for nine percent of total P&C sector revenues in 2017 (compared to approximately 20 percent in the L&H sector).

Figure 26: P&C Sector Annual Net Investment Income (\$ billions) and Net Yield on Invested Assets (%)



Source: S&P Global

Figure 27: P&C Sector Annual Net Investment Income (\$ thousands) and Net Yield on Invested Assets (%)

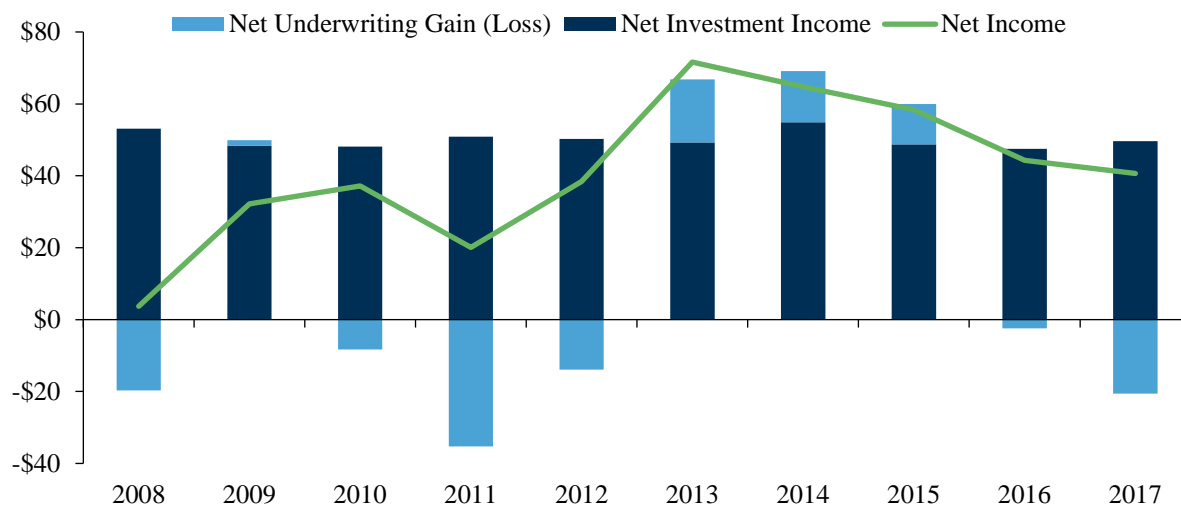
	2013	2014	2015	2016	2017
Net Investment Income	\$ 49,280,948	\$ 54,904,547	\$ 48,765,011	\$ 47,461,564	\$ 49,614,978
Total Cash & Investments	1,483,929,648	1,532,509,401	1,531,415,182	1,587,548,848	1,687,814,104
Net Yield on Invested Assets	3.43%	3.64%	3.18%	3.04%	3.03%

Source: S&P Global

Realized capital gains on investments made a significant contribution to profitability over 2017, as the P&C sector recorded net realized capital gains of nearly \$20 billion, marking a 132 percent increase from 2016. This reversed two years of declining realized capital gains. Higher gains on common stocks were the main driver of the increase in net realized capital gains, but gains on fixed income investments also contributed.

(4) Net Income

The P&C sector's net income decreased for the fourth consecutive year in 2017, dropping eight percent to almost \$41 billion from \$44 billion reported in 2016, as shown in Figure 28. An eight percent increase in losses and loss adjustment expenses exceeded the three percent gain in premiums, leading to a \$21 billion underwriting loss in 2017, and was the main cause of the decrease in net income. The increases in investment results, both investment income and realized capital gains (discussed above), blunted the decline in net income. Pre-tax operating income fell 23 percent, but a shift from an expense to a refund of federal income taxes led to the eight percent decrease in net income for 2017. Figure 29 provides a summary income statement for the P&C sector.

Figure 28: P&C Sector Net Income (\$ billions)

Source: S&P Global

Figure 29: P&C Sector Summary Income Statement (\$ thousands)

	2013	2014	2015	2016	2017
Net Premiums Earned	\$ 472,074,886	\$ 493,730,916	\$ 512,110,041	\$ 529,183,799	\$ 545,159,455
Losses and Loss Adjustment Expense Incurred	318,842,292	340,855,210	354,958,963	382,522,845	413,620,019
Other Underwriting Expense Incurred	136,211,881	139,137,758	145,136,437	148,012,217	150,581,388
Other Underwriting Deductions	(471,225)	(475,218)	857,268	1,073,235	1,602,941
Net Underwriting Gain (Loss)	17,489,999	14,213,165	11,157,373	(2,424,498)	(20,606,908)
Policyholder Dividends	3,017,264	2,943,412	3,016,579	2,943,624	3,308,785
Net Investment Income	49,280,948	54,904,547	48,765,011	47,461,564	49,614,978
Net Realized Capital Gains (Losses)	18,399,919	11,789,595	10,073,274	8,484,994	19,646,329
Finance Service Charges	3,403,200	3,271,709	3,333,008	3,452,738	3,628,618
All Other Income	(1,892,032)	(6,158,765)	(1,808,648)	(2,410,690)	(9,058,594)
Net Income After Capital Gain (Loss) Before Tax	83,663,527	75,076,697	68,503,439	51,620,483	39,915,638
Federal Income Tax	12,038,618	10,318,140	10,188,465	7,314,692	(701,068)
Net Income	\$ 71,624,732	\$ 64,757,509	\$ 58,314,974	\$ 44,305,791	\$ 40,616,706

Source: S&P Global

Figure 30 displays key measures of returns for the P&C sector. Each of these metrics declined for a fourth consecutive year. The 2017 return on average equity of 5.5 percent was well below the average of nine percent for the past ten years, and marked the second-lowest post-crisis measure.

Figure 30: P&C Operating Ratios

	2013	2014	2015	2016	2017
Pre-Tax Operating Margin	12.48%	11.60%	10.39%	7.47%	3.44%
Return on Average Equity (Capital & Surplus)	11.35%	9.56%	8.47%	6.33%	5.50%
Pre-Tax Operating Return on Average Equity	10.34%	9.34%	8.49%	6.16%	2.75%
Return on Average Assets	4.23%	3.66%	3.24%	2.40%	2.10%

Source: S&P Global

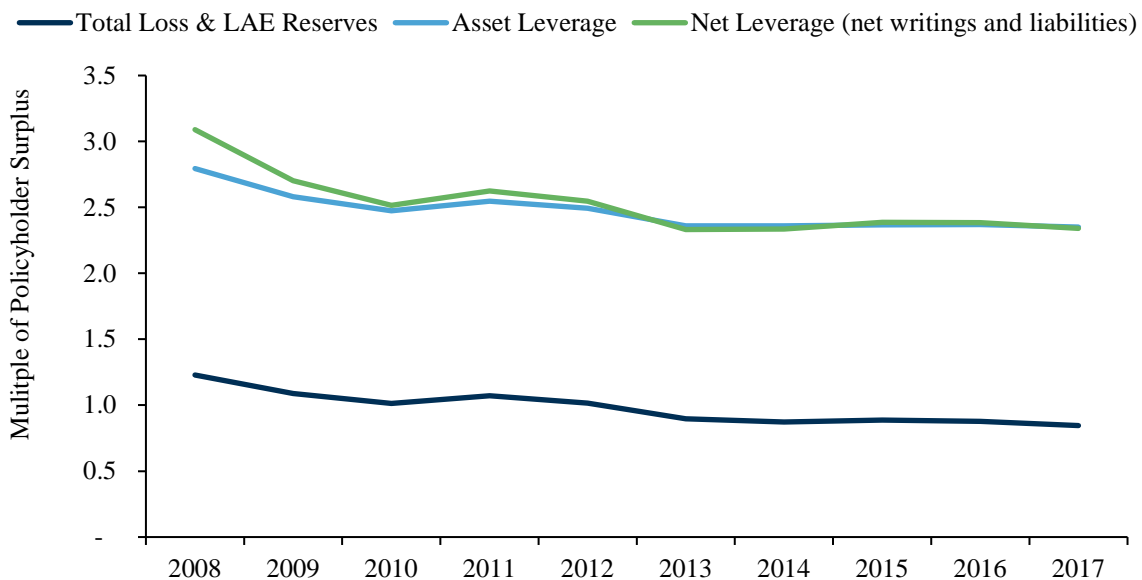
b) Condition

This section analyzes the financial condition of the P&C sector at the end of 2017, focusing on surplus, assets, and liquidity.

(1) Surplus as Regards Policyholders

The strength and flexibility of the P&C sector's capital position are demonstrated by continued year-over-year growth and reduced leverage in the post-crisis years.

Figure 31: Reduced Leverage Improving Financial Flexibility of P&C Sector



Source: S&P Global

Policyholder surplus was \$764 billion at year-end 2017, sharply up by 7.3 percent from \$712.2 billion at year-end 2016. The annual growth rate in surplus has averaged 4.0 percent over the

last decade.²⁹⁶ Removing capital infusions in the form of surplus notes did not materially change the annual growth rate in policyholder surplus on average for the last 10 years.²⁹⁷ Organic surplus growth for the P&C sector can mainly be attributed to positive earnings including net realized capital gains in addition to net unrealized capital gains, offset in part by stockholder dividends of \$29.4 billion and \$28.5 billion in 2017 and 2016, respectively. As a share of prior year-end policyholder surplus, stockholder dividends have averaged 5.0 percent annually over the last decade, less than the L&H sector average due to the P&C sector's larger surplus base. With the exception of 2009 in the post-crisis period, the P&C sector has generated capital year after year from net realized capital gains.²⁹⁸ As a share of prior year-end policyholder surplus, net realized capital gains have averaged about 1.4 percent annually post-crisis. Unrealized capital gains and losses have been even more impactful, netting an additional 2.6 percent to prior year-end policyholder surplus on average each year in the post-crisis period.

As shown in Figure 31, and similar to observations for the L&H sector, leverage ratios for the P&C sector have shown improvement since 2008, enhancing the sector's financial capacity. Though they measure different exposures, the asset and net leverage ratios presented in Figure 31 began to converge in 2013 to almost a single point in 2017.

Balance sheet strength can be affected by the volatility and credit quality of the investment portfolio, reinsurance recoverables, and agents' balances. Reduced leverage on the balance sheet has generated greater financial flexibility, enabling the P&C sector to use its capital more efficiently in mitigating potential risk exposures. Specifically, the P&C sector's asset leverage ratio was 2.35 at year-end 2017, dropping from 2.37 at the prior year end and representing a decade low from a high of 2.79 at year-end 2008 – suggesting effective risk management in mitigating investment, interest rate, and credits risks. The combined liabilities-to-equity ratio and the operating leverage ratio (together representing the net leverage ratio) was 2.34 at year-end 2017, declining from 2.38 at year-end 2016 while averaging 2.53 annually during the past decade. Liabilities were 1.6 times surplus at year-end 2017, not changing significantly since year-end 2013 but contrasting with a high point of 2.14 at year-end 2008 when policyholder surplus decreased by 12.7 percent while liabilities grew by 0.9 percent.

The post-crisis period has generally been characterized by growth in reinsurance activity, in particular for ceded business. Ceded premiums were \$145.7 billion in 2017, increasing by 5.8 percent from \$137.8 billion in 2016. The P&C sector has been ceding premiums at an annual rate of 4.1 percent on average post-2008, while retaining premiums at an average annual growth rate of 2.7 percent. Lower growth in net writings has contributed to a drop in operating leverage from a high of 0.95 at year-end 2008 to 0.73 at year-end 2017. On average, net premiums written have comprised about 0.76 times policyholder surplus each year post-crisis.

²⁹⁶ In 2008, the P&C sector experienced a 12.7 percent decrease in policyholder surplus – the only year in the last decade during which the sector sustained such a substantial drop. Excluding this outlier results in average annual growth in policyholder surplus of 5.8 percent over the post-crisis period.

²⁹⁷ Policyholder surplus, less surplus notes, decreased 13.4 percent in 2008. When eliminating that outlier, annual organic growth in policyholder surplus averaged 6.0 percent from 2009 through 2017.

²⁹⁸ The P&C sector reported net realized capital losses of \$7.8 billion in 2009. In 2008, net realized capital losses were \$20.1 billion.

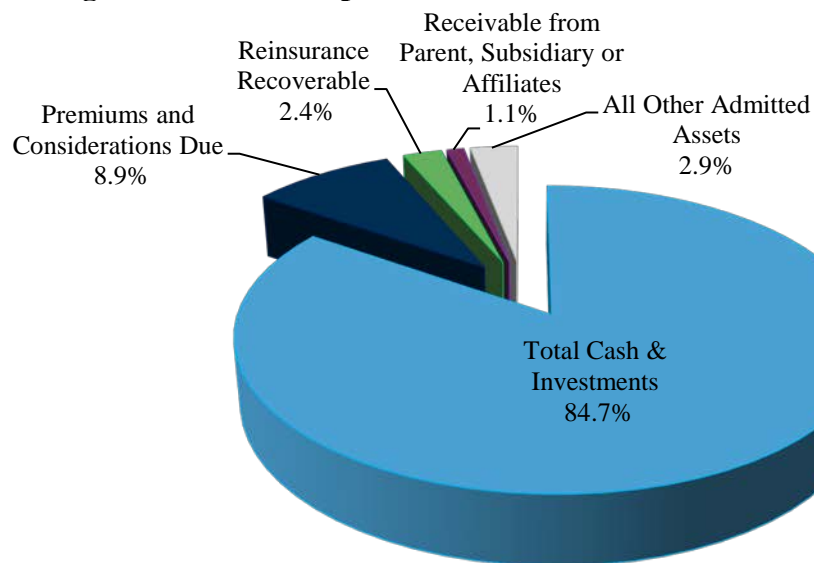
At year-end 2017, the ratio of loss and loss adjustment reserves to policyholder surplus was 0.85, decreasing from 0.88 at year-end 2016. The ratio has averaged at a multiple of less than one annually over the last 10 years, demonstrating that the P&C sector in the aggregate has maintained the financial capability to meet potential policyholder obligations.

(2) Asset Base

Contributing to the strength of the P&C sector's capital position has been the growth and composition of asset holdings. Total assets of \$2.0 trillion as of year-end 2017, relative to \$1.9 trillion as of year-end 2016, have grown at an annual rate of nearly 3 percent on average over the past decade, helping the sector maintain a stable level of capital relative to the risk exposure from its asset holdings. Policyholder surplus covered 39.2 percent of the sector's asset holdings exposed to risk²⁹⁹ as of year-end 2017, rising from 38.5 percent and 38.7 percent as of the years ending 2016 and 2015, respectively, and in comparison to an annual average of 37.8 percent each year post-crisis.

The configuration of the sector's asset portfolio has remained virtually constant for the last decade, with the bulk of holdings allocated to cash and investments. Figure 32 illustrates the composition of the P&C sector's assets at year-end 2017, which largely mirrors the distribution of assets in previous years.

Figure 32: 2017 Composition of Asset Portfolio for the P&C Sector



Source: S&P Global

On average, cash and invested assets have accounted for nearly 85 percent of total assets each year over the last decade, while premiums and considerations due have averaged in excess of 8 percent annually.

²⁹⁹ Because the risk exposure related to cash and cash equivalents is negligible to the insurer, asset holdings exposed to risk refer to total assets less cash and cash equivalents.

The P&C sector has allocated more than 61 percent to bonds on average annually in recent years, as detailed in Figure 33, while common stock holdings have averaged 22 percent of the investment portfolio.

Figure 33: Composition of Investment Portfolio for P&C Sector

	2013	2014	2015	2016	2017
Bonds	62.5%	61.5%	62.1%	61.3%	57.9%
Preferred Stocks	0.8%	1.0%	0.9%	0.7%	0.3%
Common Stocks	21.4%	21.5%	21.1%	21.8%	24.2%
Mortgage Loans	0.5%	0.7%	0.8%	0.9%	1.0%
Real Estate	0.7%	0.7%	0.8%	0.8%	0.8%
Contract Loans	0.0%	0.0%	0.0%	0.0%	0.0%
Derivatives	0.0%	0.0%	0.0%	0.0%	0.0%
Cash & Short Term Investments	5.6%	5.9%	5.8%	5.8%	6.8%
Other Investments	8.4%	8.7%	8.5%	8.6%	8.9%
Total Cash & Invested Assets	100%	100%	100%	100%	100%

Source: S&P Global

This composition of investment holdings aligns with the risk management practices employed by the P&C sector to address both the shorter-term obligations of some P&C lines (such as auto liability) as well as longer-tailed liabilities (such as medical malpractice and workers' compensation). Annual growth in total bonds has held steady, averaging 1.4 percent in the last decade, whereas common stocks have grown by 6.8 percent³⁰⁰ on average. Total bonds were \$1.1 trillion in 2017, relative to \$1.0 trillion in the previous three years. Of the entire bond portfolio, more than 91 percent has consistently been comprised of long-term bonds, while durations have largely ranged between one and ten years. With less than ten percent of total bonds on average comprised of private placements each year, bond holdings have largely been publicly-traded issuances. Of note is the shift in the allocation of the investment portfolio to equities, with a steady increase in the share of common stock holdings from 2010 through 2017. Since year-end 2010, bond holdings as a share of cash and investments declined by more than 8 percentage points, while common stock holdings rose by exactly the same magnitude. Figure 33 reflects this trend between 2013 and 2017.

Finally, total mortgages, though still a small percentage of total cash and invested assets, have shown consistent year-over-year growth, beginning at year-end 2011. Total mortgage loans were \$17.3 billion as of year-end 2017, accounting for one percent of cash and invested assets but 4.2 times the value of mortgage holdings as of year-end 2010.

As with the L&H sector, the P&C sector demonstrated a shift in investment holdings, which can be attributed to both market performance and the search for yield. Specifically, the risk exposures highlighted by the financial crisis compelled insurers to increase their holdings of safe

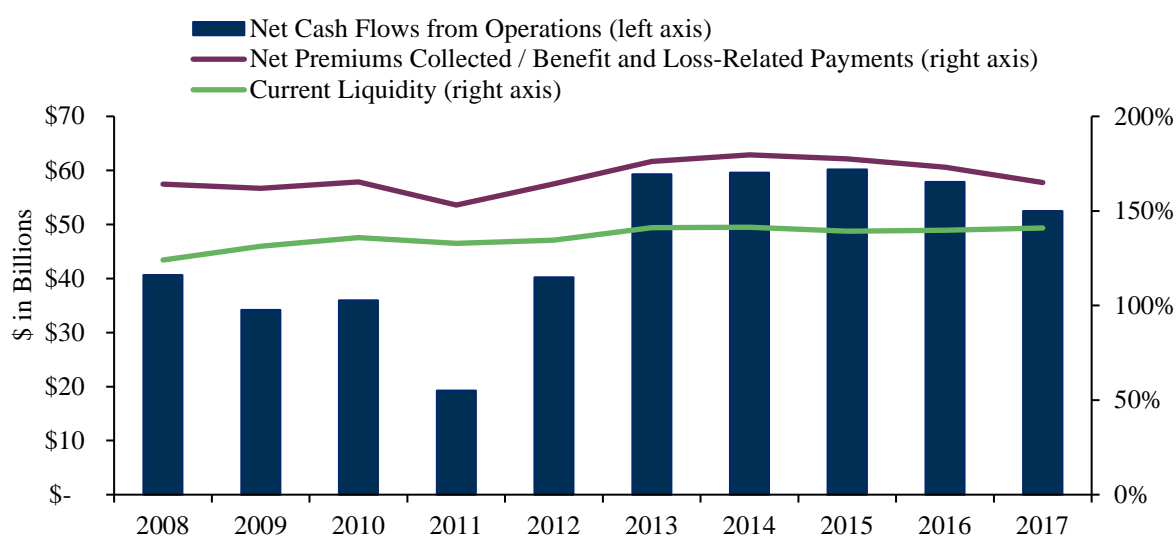
³⁰⁰ The 6.8 percent annual average growth rate of common stocks takes into account the impact of the financial crisis. Growth in common stock declined sharply in 2008 by 21.3 percent from 2007, which appears to be an outlier across the last 10 years. Common stocks showed an average annual growth rate of 9.9 percent from 2009 through 2017.

but low-yielding bonds. As funding gaps widened, pressure to close these exposures also grew, leading insurers to specifically increase their equity holdings with the prospect of higher returns.

(3) Liquidity

The P&C sector has managed its liquidity needs effectively in meeting the day-to-day needs of its business operations, thereby maintaining a sound liquidity position over the past decade. With benefits and loss-related payments consuming significantly less of total net premiums collected annually, the sector has reported positive net cash flows from operations in each of the last 10 years. Recent net cash flows from operations were \$52.5 billion and \$57.8 billion in 2017 and 2016, respectively. On a cash basis, net premium receipts have averaged an annual growth rate of 2.1 percent, covering benefit and loss-related payments by 1.7 times on average since year-end 2008. As Figure 34 illustrates, premiums collected, net of reinsurance, exceeded benefit and loss-related payments by more than 65 percent and 73 percent at years ending 2017 and 2016, respectively, while the current liquidity ratio³⁰¹ improved from 124 percent at year-end 2008, stabilizing at an average annual rate of 141 percent over the last five years.³⁰²

Figure 34: P&C Sector Cash Flows from Operations



Source: S&P Global

Positive net cash flows from operations have contributed to annual growth in cash and invested assets by averaging 2.8 percent over the last decade, expanding the P&C sector's financial

³⁰¹ Current liquidity is used to determine the amount of liabilities that can be covered with liquid assets. It is calculated as follows: the numerator equals net admitted cash and investments less the sum of net admitted first lien real estate loans, net admitted real estate loans less first liens, net admitted occupied properties, net admitted income generating properties, net admitted properties held for sale, affiliated long-term bonds, and affiliated preferred stock; the denominator equals total liabilities less ceded reinsurance premium payable.

³⁰² This liquidity analysis is based on cash inflows and outflows – premiums that were collected as well as benefit and loss-related payments made during the year. The combined ratio referenced in the income statement discussion refers to premiums earned and written, and captures dividends and other expenses. These include commissions, salaries and benefits, administrative expenses, and taxes, in addition to incurred loss and loss adjustment expenses.

flexibility. Liquid assets (the numerator of the current liquidity ratio) have represented at least 2.2 times the level of aggregate policyholder surplus each year since 2008.

Certain concentrations of risk within the sector's investment portfolio have evolved since year-end 2008, likely reflective of the P&C sector's response to a sustained low interest rate environment in the post-crisis period and the search for yield. Within the bond portfolio, private-placement bonds as a share of aggregate surplus was 18.2 percent at year-end 2017, slightly down from the decade high of 18.6 percent at year-end 2016 but 2.4 times the 10-year low of 7.7 percent at year-end 2008. Annual growth in private placements has averaged 16.2 percent over the decade, whereas annual growth in publicly-traded bonds has averaged 0.3 percent.

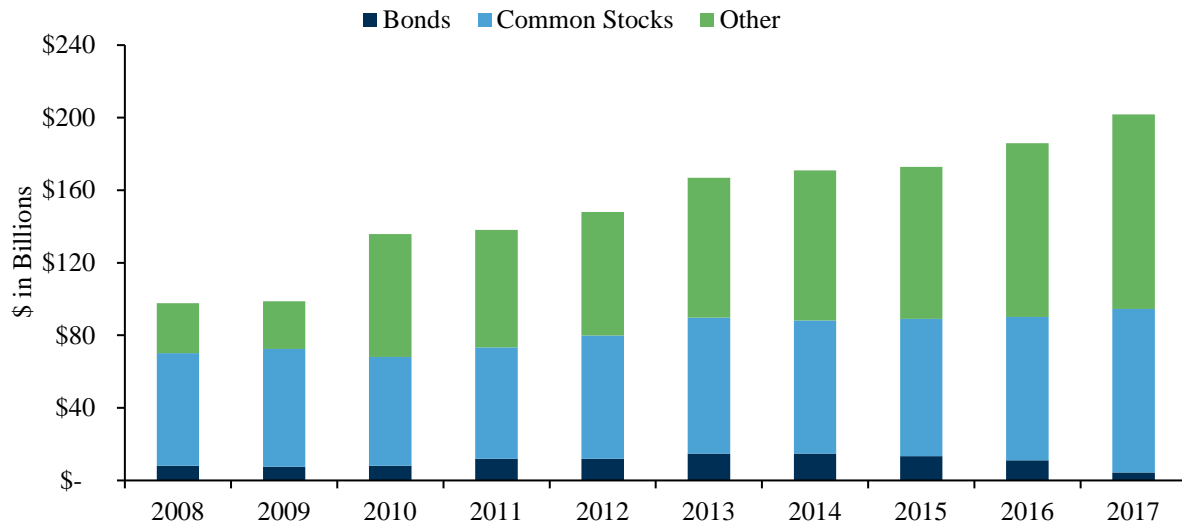
Nearly 30 percent of the P&C sector's bond portfolio has consistently been comprised of securities issued by U.S. federal, state, and municipal governments. More than two-thirds of bond holdings have consisted of some form of revenue bond investments, including special revenue and industrial revenue bonds. While revenue bonds can often be issued by local or municipal governments, the debt service is typically paid by a private company. Thus, the credit risk exposure for these types of bond holdings is heightened for the bondholder, i.e., repayment becomes a risk exposure to the insurer if the entity responsible for repayment becomes distressed. At year-end 2017, revenue bond holdings were \$720.8 billion, up from \$710.7 billion at year-end 2016. Revenue bond investments by the P&C sector have grown at a rate of 2.1 percent on average each year in the last decade, at least 14 times the average annual growth rate for government bond holdings.

In addition, there has been a recent uptick in the P&C sector's holdings of structured securities. Total structured securities held by the P&C sector were \$150.1 billion and \$144.4 billion as of the years ending 2017 and 2016, respectively, compared to \$152.2 billion at year-end 2008 and \$158.9 billion at year-end 2007. Of the structured securities portfolio, mortgage-backed securities (MBS) have comprised an increasing share – 41.5 percent at year-end 2017 relative to 37.7 percent at year-end 2008. Within the MBS portfolio, MBS issued by the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac) have accounted for a greater proportion of the total, steadily rising from 74.4 percent at year-end 2012 to 85.7 percent at year-end 2017. In 2008 and 2007, Fannie Mae and Freddie Mac-issued MBS represented 80.9 percent and 84.4 percent of the sector's MBS portfolio, respectively. Fannie Mae and Freddie Mac are both under government conservatorship and operate in accordance with written capital support agreements with Treasury. As such, their MBS are not explicitly guaranteed by the federal government. By contrast, holdings of Government National Mortgage Association (Ginnie Mae) MBS, which are guaranteed in full by the federal government, have steadily declined since 2012. Ginnie Mae MBS accounted for 10.7 percent of total MBS holdings at year-end 2017 compared to 14.7 percent and 9.9 percent at the years ending 2008 and 2007, respectively.

Growth in affiliated investments presents another potential liquidity risk exposure for the P&C sector. Though 2008 saw a decrease in affiliated holdings from the prior year, they have been on the rise ever since. In particular, affiliated cash and investments were \$201.9 billion at year-end 2017, rising by 8.6 percent from \$185.8 billion at the prior year end. Affiliated cash and

investments represented 11.9 percent of total cash and invested assets and 26.4 percent of policyholder surplus at year-end 2017, up from 7.8 percent of cash and investments and 19.1 percent of policyholder surplus at year-end 2009. Figure 35 shows the growth and shift in the composition of affiliated investments over the past decade.

Figure 35: P&C Sector's Affiliated Investments



Source: S&P Global

Other types of investments have come to dominate affiliated holdings, more than doubling their share of total affiliated investments from year-end 2009 and surpassing common stock investments. More than 98 percent of affiliated other investments in Figure 35 were investments outside of preferred stock, mortgage loans, and cash and invested assets at year-end 2017.³⁰³

There are several factors that mitigate the P&C sector's vulnerability to these risk exposures, should market conditions weaken. First, when observing financial trends over the last five years, it becomes apparent that high quality bonds continue to make up the bulk of the sector's portfolio of fixed-income securities, including MBS. Investment-grade bonds have averaged about 96 percent of the P&C sector's bond portfolio and about 62 percent of cash and invested assets annually since 2013. Second, investment-grade bonds have encompassed 1.4 times policyholder surplus on average in each of the last five years. Third, unaffiliated bond holdings have accounted for close to 70 percent of the unaffiliated investment portfolio on average each year, while unaffiliated common stocks have averaged 19 percent annually. Finally, unaffiliated cash and invested assets have remained twice the level of policyholder surplus since year-end 2013.

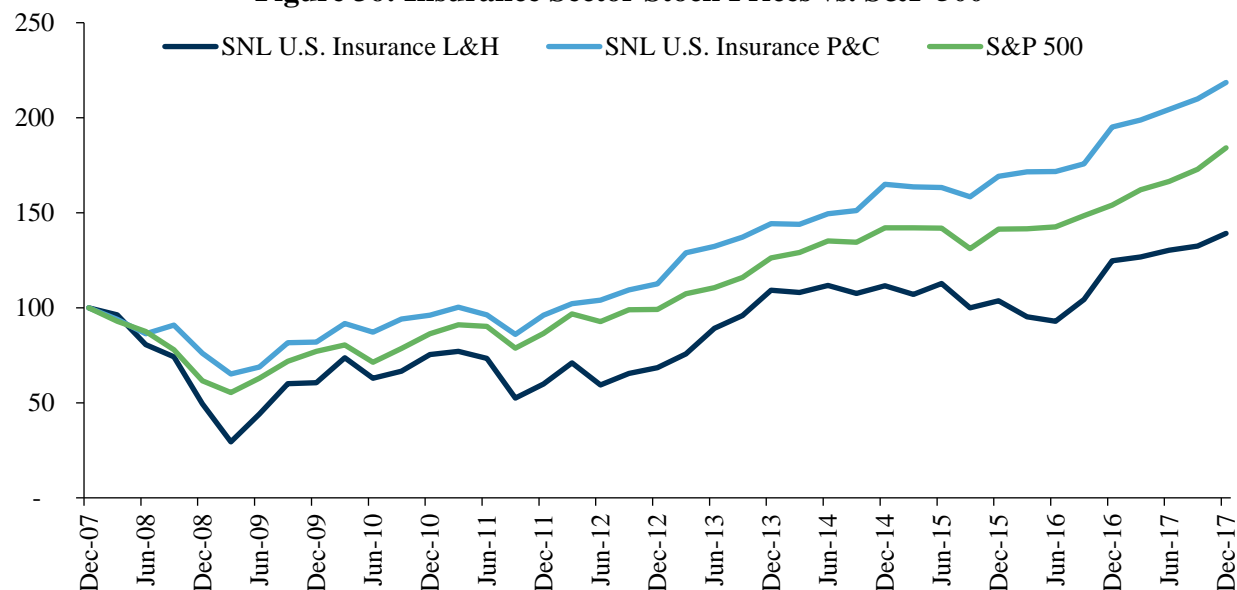
³⁰³ Affiliated other investments include, but are not limited to, surplus notes, limited partnerships, joint ventures, hedge funds, private equity funds, and direct investments.

4. Market Performance

Stock price movements are indicators of investors' perceptions about the recent financial results and future financial prospects of a firm, an industry sector, or in a broader context, the general economy. The discussion that follows considers the price performance of stock indices for the L&H and P&C sectors, as compared to the performance of the Standard and Poor's 500 Index (S&P 500).

Over the ten-year period from December 31, 2007 through the end of 2017, the P&C sector outperformed the S&P 500, as shown in Figure 36. On the other hand, the L&H sector stock index underperformed the S&P 500 during this period. The P&C sector was generally a market performer leading up to the financial crisis, but has outperformed the S&P 500 since then. The L&H sector slightly outperformed the S&P 500 leading up to the financial crisis, and has underperformed during and since then. Since the end of 2007, the P&C stock index gained 119 percent and the L&H stock index increased 39 percent; over the same period, the S&P 500 gained 84 percent. In the short-term, for 2017 both the P&C stock index and L&H stock index underperformed the S&P 500 with each gaining 12 percent, compared to a 20 percent increase for the S&P 500 (see Figure 37).

Figure 36: Insurance Sector Stock Prices vs. S&P 500



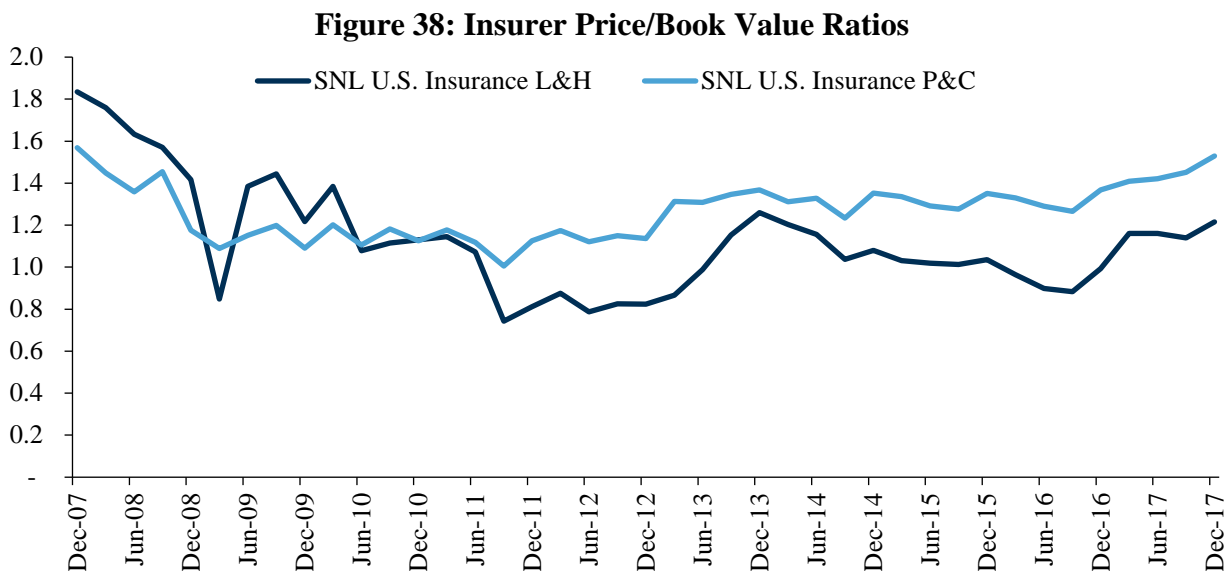
Source: S&P Global

Figure 37: Insurance Sector Stock Prices vs. S&P 500

	Dec 2016	Mar 2017	Jun 2017	Sep 2017	Dec 2017	Qtr/Qtr	Yr/Yr
SNL Life	125	127	130	132	139	5.11%	11.60%
SNL P&C	195	199	204	210	219	4.08%	12.03%
S&P 500	154	162	167	173	184	6.56%	19.64%

Source: S&P Global

The price-to-book value multiple, which compares on a per share basis the market value of a firm to its book value (i.e., reported equity on its balance sheet), is a popular metric by which to measure valuation. If a share of an insurer's stock is selling for less than its book value per share, the market is valuing the firm at less than its assets minus its liabilities (net worth); the opposite is true if the stock is trading at a premium to its book value. Figure 38 compares L&H and P&C sector price-to-book value ratios from year-end 2007 through year-end 2017. The narrowing in the premium of L&H sector stocks to book value that occurred from 2014 through 2016 reversed in 2017, settling at a multiple of 1.21 times book value at the end of the year, up meaningfully from the 0.99 multiple at the end of 2016. P&C sector stocks saw the market premium over book value increase, ending 2017 at a multiple of 1.53 times book value compared to a multiple of 1.37 times book value at the end of 2016.



Source: S&P Global

B. Capital Markets Activity

Equity markets fared well over 2017, affording the U.S. domestic insurance industry continued access to the capital markets. During the year, 14 insurance-related public equity offerings were completed, with an aggregate value of \$4.4 billion.³⁰⁴ This level of activity was lower in terms of both the number of deals and the aggregate value compared to 2016 (22 offerings valued at \$5.4 billion). Of the total offerings, only four transactions valued at \$137 million were initial public offerings (IPO), marking a significant decrease from the three IPOs valued at \$1.3 billion that occurred in 2016. The largest single public equity offering in 2017 was a \$1.5 billion offering by Athene Holding, Ltd. Private placement equity transactions were also a source of new capital for insurers, with \$1.2 billion raised in 2017.

³⁰⁴ All data in this section with respect to capital markets and mergers and acquisitions is sourced from S&P Global, as collected and calculated by FIO. This data includes Bermuda-based holding companies for which primary insurance underwriting subsidiaries are domiciled in the United States.

Debt markets continued to be the preferred source of additional capital for insurers in 2017, despite a slight rise in interest rates. During the year, U.S. insurers raised an aggregate \$54.3 billion in 116 separate debt offerings.³⁰⁵ Debt issuance decreased from the \$64.7 billion raised in 96 offerings in 2017. Approximately 63 percent of 2017 debt sales were transacted in public markets, with the remaining 37 percent coming from private placements. MetLife Inc. (combined with its subsidiaries) was the largest issuer of debt in 2017, raising \$7.4 billion (14 percent of the industry total) through 17 separate offerings. The second- and third-largest issuers of debt in 2017 were both health insurers: Anthem, Inc. and UnitedHealth Group, which raised \$5.5 billion and 5.4 billion, respectively. The remainder of the top five issuers of debt in 2017 included New York Life Insurance Company (\$4.2 billion) and Jackson National Life Insurance Company (\$3.5 billion). In the aggregate, the funds raised by the top five issuers of debt accounted for 48 percent of the 2017 industry total. The largest single offering during 2017 was a \$1.6 billion issue sold by Anthem Inc.

1. Mergers & Acquisitions of U.S. Insurers

Over the course of 2017, there were 93 merger and acquisition (M&A) transactions announced involving U.S. insurers, with a total value of \$87.1 billion.³⁰⁶ The number of deals was little changed from the 91 transactions in 2016, but the aggregate value of the 2017 deals far surpassed the \$21.6 billion in 2016 due to one significant merger announced late in 2017. The aggregate value of 2017 M&A activity was somewhat higher than recent historical figures other than 2015. The largest transaction in 2017 was the December announcement of the acquisition of health insurer Aetna Inc. by CVS Health Corporation, a retail pharmacy chain, a deal valued at approximately \$70 billion.³⁰⁷ The second-largest deal in 2017 was the acquisition of New York State Catholic Health Plan, Inc. by Centene Corporation, valued at \$3.8 billion. Two of the remaining top five 2017 deals, the third- and fifth-largest, involved acquisitions of insurance operations by private equity firms: Cerberus Capital Management L.P. acquired IASIS Healthcare LLC for \$1.9 billion, while CF Corporation acquired Fidelity & Guaranty Life for \$1.8 billion. The fourth-largest deal in 2017 was the acquisition of Warranty Group, Inc. by Assurant, Inc. for \$1.9 billion.

2. Alternative Risk Transfer Insurance Products

Modern insurance markets include a growing and innovative role for alternative risk transfer (ART) instruments. The lion's share of this market is comprised of insurance linked securities (ILS), such as catastrophe (cat) bonds and collateralized reinsurance. Other segments include industry loss warranties, reinsurance "sidecar" transactions, longevity swaps, and catastrophe

³⁰⁵ Foreign currency-denominated transactions converted to U.S. dollars by S&P Global.

³⁰⁶ Transactions were announced between January 1, 2017 and December 31, 2017, and were either completed during the year or remained pending at the end of 2017. S&P Global did not report transaction values for all deals.

³⁰⁷ See, e.g., Bruce Japsen, "CVS Says Aetna Merger 'Making Good Progress' on Regulatory Front," *Forbes*, May 2, 2018, <https://www.forbes.com/sites/brucejapsen/2018/05/02/cvs-says-aetna-merger-making-good-progress-on-regulatory-front/>.

futures.³⁰⁸ By using the capital and derivatives markets to attract investors from outside the insurance industry, ART instruments increase the capacity for reinsurance and retrocession, and thereby increase the industry's supply of insurance and enhance its efficiency.

Most risks covered through ART are from severe wind, flood, earthquake, and other natural disasters. Innovation has broadened the scope of coverage to include longevity risk, credit risk (such as guarantees for mortgages and municipal debt securities), and operational risk. Moreover, the range of market participants has broadened to include state governments, such as Texas and Florida, emerging market governments, such as Turkey, and the U.S. federal government, which recently brought to market a cat bond for some of the risks under the NFIP, as also discussed in Section III.D of this Report.³⁰⁹ The following section provides more detail on the scale and scope of this market and its developments.

a) Catastrophe Bonds and Other Insurance-Linked Securities

A large share of the ART market is comprised of ILS, first introduced to the market over twenty years ago,³¹⁰ and now having \$35.3 billion in outstanding securities.³¹¹ Figure 39 shows the growth in both the outstanding amount and annual issuance of ILS. The outstanding amount at the end of the second quarter of 2018 was \$9.4 billion, 20.5 percent larger than the end of the second quarter of 2017.³¹² As a result, catastrophe bonds and other ILS represent a large share of the ART market, as shown in Figure 40. The growth is measured by the amount of risk capital used to collateralize insurance coverage. Most ILS are issued with a maturity between two and three years, and therefore roughly a half to a third of the total outstanding amount matures every year.

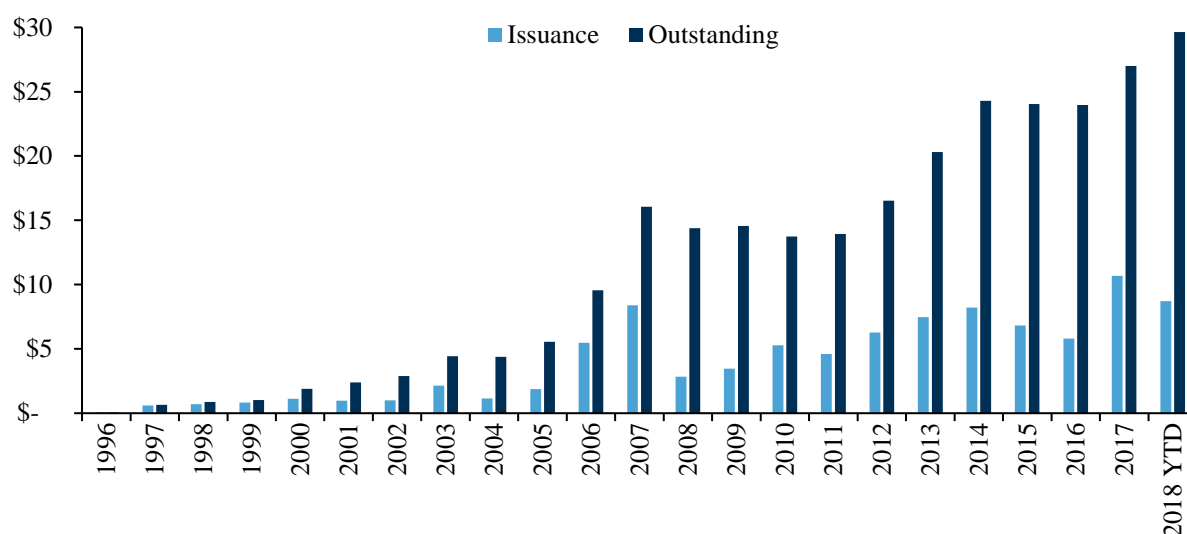
³⁰⁸ The Chicago Board of Trade introduced catastrophe futures in 1992. See Commodity Futures Trading Commission, *Annual Report* (2004), <https://www.cftc.gov/sites/default/files/files/anr/anr2004.pdf>.

³⁰⁹ Part of the NFIP's reinsurance efforts include the transfer of flood risk to the private sector through the issuance of cat bonds. See "National Flood Insurance Program's (NFIP) Reinsurance Program," NFIP, last updated July 31, 2018, <https://www.fema.gov/nfip-reinsurance-program>.

³¹⁰ ILS issuances date back to market recovery efforts following losses from Hurricane Andrew in 1992. See, e.g., "Catastrophe Bond & Insurance-Linked Securities Deal Directory," Artemis, http://www.artemis.bm/deal_directory.

³¹¹ Artemis, *Q2 2018 Artemis Catastrophe Bond & ILS Market Report* (2018), http://www.artemis.bm/artemis_ils_market_reports/downloads/q2-2018-cat-bond-ils-market-report.pdf.

³¹² Artemis, *Q2 2018 Artemis Catastrophe Bond & ILS Report*; Artemis, *Q2 2017 Artemis Catastrophe Bond & ILS Market Report* (2017), http://www.artemis.bm/artemis_ils_market_reports/downloads/q2_2017_cat_bond_ils_market_report.pdf.

Figure 39: Catastrophe Bond & ILS Risk Capital Issued & Outstanding By Year (\$ billions)

Source: Aon Benfield Securities

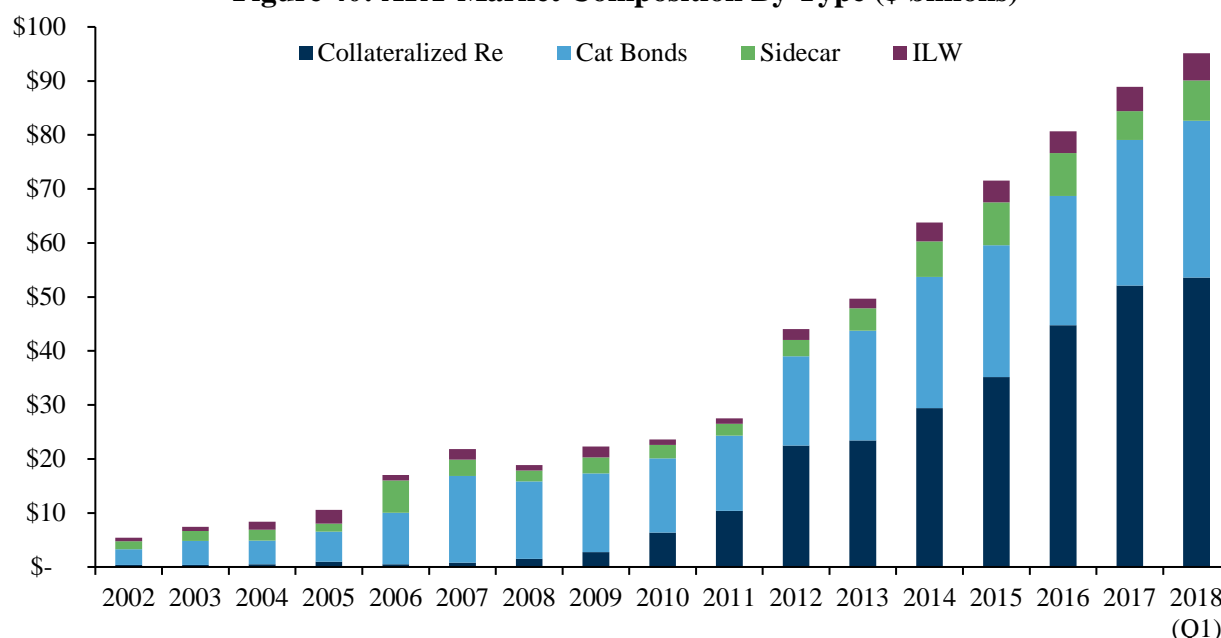
In addition to the growth in scale, the ART market has innovated to grow in scope to cover more forms of insurance. For example, ILS have provided reinsurance coverage to bond and mortgage guaranty insurers, as when Build America Mutual conducted a \$100 million issuance to transfer credit risk on municipal bonds,³¹³ and Arch Capital obtained \$1 billion in reinsurance coverage on parts of its mortgage guaranty portfolio.³¹⁴ Other innovations include Credit Suisse's use of ILS to cede or transfer \$222 million of operational risk to capital markets.³¹⁵ The U.K.'s Pool Re has announced plans to investigate the use of ILS to back terrorism risk reinsurance.³¹⁶

³¹³ "Fidus Re Ltd., the First Ever Financial Guarantee ILS Deal Targets \$100M," *Artemis*, April 9, 2018, <http://www.artemis.bm/blog/2018/04/09/fidus-re-ltd-the-first-ever-financial-guarantee-ils-deal-targets-100m/>.

³¹⁴ See, e.g., David Pilla, "Arch Secures \$374.5 Million in ILS Coverage for Mortgage Insurance," *Best's News Service*, April 19, 2018, <http://news.ambest.com/newscontent.aspx?refnum=207912>; "Arch MI Buys Indemnity Reinsurance from Bellemeade Re," *Bermuda: Re+ILS*, August 24, 2018, <https://www.bermudareinsurancemagazine.com/news/arch-mi-buys-indemnity-reinsurance-from-bellemeade-re-4202>.

³¹⁵ "Catastrophe Bond & Insurance-Linked Securities Deal Directory: Operational Re II Ltd.," *Artemis*, http://www.artemis.bm/deal_directory/operational-re-ii-ltd/.

³¹⁶ "Pool Re Investigates Use of UK ILS Structure for Terror Retrocession," *Artemis*, March 7, 2018, <http://www.artemis.bm/blog/2018/03/07/pool-re-investigates-use-of-uk-ils-structure-for-terror-retrocession/>.

Figure 40: ART Market Composition By Type (\$ billions)

Source: Aon Benfield Securities

b) Collateralized Reinsurance

Collateralized reinsurance (CRI), the fastest growing component of alternative capital, is now the largest segment of the ART market, as illustrated in Figure 40.³¹⁷ CRI transactions involve a non-insurer third party investor assuming risk from the cedant through a reinsurance agreement backed by collateral in the full amount of the coverage limit.³¹⁸ The collateral assets are placed in a trust that is pledged to the cedant, and the assets are invested according to contract terms that typically require liquid, low-risk securities. CRI provides reinsurance coverage by mobilizing capital (usually from a non-insurance company such as a hedge fund) to assume insured risk by posting collateral in amounts equal to the amount of coverage. The collateral provides a high level of creditworthiness for the cedant, and this allows the cedant to receive regulatory credit to meet reserve and capital requirements. This ability to substitute collateral for the reserves and capital of a regulated insurer allows investors such as hedge funds, pension funds, and high net wealth individuals to compete for the business in reinsurance markets. In exchange for assuming

³¹⁷ Aon Benfield, *Reinsurance Market Outlook: June and July 2018* (August 7, 2018), 5, <http://thoughtleadership.aonbenfield.com/sitepages/display.aspx?tl=784>. See also Insurance Information Institute, *Alternative Capital and Its Impact on Insurance and Reinsurance Markets* (March 2015), 7, https://www.iii.org/sites/default/files/docs/pdf/paper_alternativecapital_final.pdf.

³¹⁸ Daniela Collis and Sie Liang Lau, Institute and Faculty of Actuaries, “Alternative Sources of Capital” (presentation, Asia Conference, Kuala Lumpur, Malaysia, March 4, 2016), <https://www.actuaries.org.uk/documents/d02-alternative-capital-insurers-and-reinsurers-and-current-state-reinsurance-market>.

the insured risks, the investors receive the returns on the invested collateral and the premiums paid by the cedant.

c) Industry Loss Warranties

An industry loss warranty (ILW) is a derivatives contract structured to provide protection (and conversely exposure) akin to insurance policies through options-like contracts. Like typical options, the purchaser pays a premium that reflects the expected payoff under the contract. ILWs were traded as early as the 1980s, primarily for the purpose of retrocession,³¹⁹ and became more popular after Hurricane Katrina in 2005 and their growth surged again after historic catastrophe losses in 2011 when the retrocession and reinsurance market needed to attract additional capital.³²⁰

In order to have regulatory treatment as insurance contracts, ILWs are structured with a double trigger (a trigger is equivalent to strike prices in options parlance). One trigger is the amount of losses as measured by an established industry loss index,³²¹ and the other is the amount of indemnified claims losses reported by the purchaser of the ILW.³²² The latter trigger allows the ILW purchaser to receive regulatory credit for ceding the insurance risk. ILWs are not the largest segment of the ART market, but have played an important role in developing the market and continue to serve a key function in the price discovery process. Importantly, ILWs are traded in derivatives markets during the period when named storms approach shorelines.³²³

The use of collateral to secure payments on ILW contracts differs from that of ILS and CRI. While some ILW transactions are collateralized, such as the sale of protection by a non-insurer (e.g., a hedge fund), in other cases they are not.³²⁴

³¹⁹ Swiss Re sigma, *The Role of Indices in Transferring Insurance Risks to the Capital Markets* (September 2009), 4, http://www.swissre.com/sigma/42009/The_role_of_indices_in_transferring_insurance_risks_to_the_capital_market_s.html.

³²⁰ Nicholas Bradley and Stephen Kilner, “When The Winds Blow Can You Rely On Your ILW?,” *InsuranceDay*, May 20, 2013, <https://www.pinsentmasons.com/PDF/Insurance%20Day%20-%20May%202013.pdf>.

³²¹ See, e.g., Nadine Gatzert, Hato Schmeiser, and Denis Toplek, *An Analysis of Pricing and Basis Risk for Industry Loss Warranties* (2007), <http://www.aria.org/meetings/2007papers/IWC%20-%202%20-%20Toplek.pdf>. Examples of industry loss indices include those provided by Property Claims Services, Risk Management Solutions, and Swiss Re sigma.

³²² Swiss Re sigma, *The Role of Indices*, 16.

³²³ “InsuranceERM, “Strong Demand Boosts ILW Market” (Summer 2012), <http://aon.mediaroom.com/download/InsuranceERM%2B-%2BStrong%2Bdemand%2Bboosts%2BILW%2Bmarket%2B-%2BJuly%2B2012.pdf>.

³²⁴ “A Bluffer’s Guide to Alternative Capital,” *Leader’s Edge*, March 2015, <https://leadersedgemagazine.com/articles/%202015/02/a-bluffers-guide-to-alternative-capital>.

ILWs are easier to transact than other forms of ART because they have lower transactions costs, allowing their use to price cat risk on a more frequent basis. One key example is the trading of cat risks from a named hurricane as the storm develops and moves towards shore:

Live Cat industry loss warranty contracts are traded while an event is occurring, often while a storm approaches landfall. Dead Cat industry loss warranties can be bought and traded on an event which has already happened but where the final loss amount is not yet known. Back-up Covers can be arranged after an event has occurred to provide protection against follow-on events which certain catastrophes can cause (such as flooding or fire following an event).³²⁵

d) Sidecars

A “sidecar” is another means of attracting capital from non-insurance sources to assume reinsurance risk in a fully collateralized transaction. A typical transaction involves a reinsurer setting up a special purpose reinsurance vehicle to which the reinsurer cedes premiums while also acting as manager. Other reinsurers and non-insurance investors participate on the other side of the transaction by posting collateral in the full amount of the coverage, thus assuming risk in exchange for the premiums and returns on the invested collateral.³²⁶ The use of reinsurance sidecars grew rapidly until 2006, but their market share has diminished with the growth of CRI and other ART instruments.

C. International Insurance Marketplace Overview

The United States remained the world’s largest single-country insurance market in 2017, with a 28 percent market share of global direct premiums written (see Figure 42).³²⁷ This market share was slightly lower compared to the previous two years, but represents a three percent increase over 2012. When viewed as a single market, the EU’s share of global direct premiums written (also 28 percent), including the United Kingdom, is comparable to the market share of the United States. Notably, in 2017 China overtook Japan as the second-largest single-country insurance market, with 11 percent of global direct premiums written. Globally, direct premiums written increased only 1.5 percent in real terms (adjusted for inflation) in 2017 with slowing in both the life and non-life sectors.³²⁸ Growth in non-life premiums of 2.8 percent outpaced the 0.5 percent

³²⁵ “What Are Industry Loss Warranties (ILWs)?” Artemis, <http://www.artemis.bm/library/what-are-industry-loss-warranties.html>.

³²⁶ Sie Liang Lau, “Alternative Sources of Capital” (presentation, SOA Actuarial Seminar, Seoul, South Korea, November 16, 2015), <https://www.soa.org/files/pd/2015/general-insurance/pd-2015-gi-session-3.pdf>.

³²⁷ Swiss Re sigma, *World Insurance in 2017: Solid, but Mature Life Markets Weigh on Growth* (July 5, 2018), http://institute.swissre.com/research/library/sigma_3_2018_en.html. Swiss Re sigma examines insurance and macroeconomic data from 147 countries sourced through Swiss Re Institute. Growth rates are presented in real terms, i.e., adjusted for inflation as measured by local consumer price indices. Swiss Re sigma separates the insurance industry into “life” and “non-life” sectors as is the practice outside the United States; under this convention, the “non-life” sector includes health insurance.

³²⁸ See Swiss Re sigma, *World Insurance in 2017*, 1.

increase in life premiums.³²⁹ Both overall and sectoral premiums growth trailed the 3.3 percent gain in global gross domestic product in 2017.³³⁰

Consistent with the past several years, emerging markets exhibited a considerably greater rate of premium growth than advanced markets, in total and in both the life and non-life sectors. The modest growth in global life premiums was driven mainly by a 2.7 percent drop in life premiums in advanced economies, while emerging economies experienced very strong life premiums growth of 14 percent. The figures for non-life premiums were not as dramatic, with advanced economies recording non-life premiums growth of 1.9 percent and emerging economies recording non-life premiums growth of 6.1 percent.³³¹

Figure 42: Gross Premiums Written and Market Share by Country, 2012 vs. 2017

2012 Rank	2017 Rank	Country	2012 Premium Volume (\$ millions)	2012 World Market Share (%)	2017 Premium Volume (\$ millions)	2017 World Market Share (%)	Change in World Market Share (%)
1	1	United States	\$ 1,272,005	27.38	\$ 1,377,114	28.15	2.83
4	2	PR China	245,511	5.28	541,446	11.07	109.46
2	3	Japan	653,174	14.06	422,060	8.63	-38.63
3	4	United Kingdom	322,306	6.94	283,331	5.79	-16.51
5	5	France	237,605	5.11	241,603	4.94	-3.42
6	6	Germany	232,437	5.00	222,978	4.56	-8.89
7	7	South Korea	166,184	3.58	181,218	3.70	3.57
8	8	Italy	144,218	3.10	155,509	3.18	2.41
9	9	Canada	124,637	2.68	119,520	2.44	-8.92
13	10	Taiwan	87,752	1.89	117,474	2.40	27.15
15	11	India	65,830	1.42	98,003	2.00	41.40
14	12	Brazil	82,267	1.77	83,315	1.70	-3.81
12	13	Australia	86,214	1.86	80,061	1.64	-11.80
10	14	Netherlands	95,384	2.05	79,013	1.62	-21.32
14	15	Spain	72,179	1.55	70,547	1.44	-7.17
18	16	Ireland	45,297	0.97	64,306	1.31	34.84
NR	17	Hong Kong	32,627	0.70	61,286	1.25	78.41
16	18	Switzerland	60,814	1.31	57,904	1.18	-9.57
17	19	South Africa	54,365	1.17	47,796	0.98	-16.50
19	20	Sweden	37,079	0.80	36,580	0.75	-6.30
World			\$ 4,646,040		\$ 4,891,694		

Source: Swiss Re sigma, *World Insurance in 2017*

³²⁹ Swiss Re sigma, *World Insurance in 2017*, 1-2.

³³⁰ Swiss Re sigma, *World Insurance in 2017*, 1.

³³¹ Swiss Re sigma, *World Insurance in 2017*, 1-2. Swiss Re sigma's country classifications of "advanced" and "emerging" generally follows the International Monetary Fund's classification system.

D. Domestic Insurance Market Outlook

Full year 2018 insurance industry results will be reviewed by FIO in next year's *Annual Report on the Insurance Industry*. Based on financial results reported by insurers through the first half of 2018, the outlook for the U.S. insurance industry appears to be a continuation of the healthy trends observed in 2017. The effects of ongoing monetary tightening and recent expansionary fiscal measures, however, may be more marked in 2018. Since 2015, the Federal Reserve has raised the fed funds rate on seven separate occasions, each by 25 basis points, with the most recent increase in June 2018. The fed funds rate currently stands at 2.0 percent, which is also the Federal Reserve's target inflation rate. However, the interest rate hikes have yet to manifest themselves fully in the financial results of insurers.³³² After a persistent decline in annual yields on invested assets since 2007, the L&H sector reported a slight uptick by two basis points in 2017 and a four basis point increase for the first six months of 2018 relative to the comparable period a year ago. For the P&C sector, yields rose by more than 18 basis points during the first half of 2018 compared to the same period in 2017, suggesting an improvement may be in store for 2018 after the sector reported two consecutive years of flat yields.

Though U.S. employment has grown past full employment levels,³³³ with an unemployment rate of 3.9 percent as of August 31, 2018, and wages have exhibited some upward movement,³³⁴ there is little likelihood of a sudden spike in interest rates to negatively affect life insurers through increased surrenders by policyholders and unrealized losses in investment portfolios. Both insurance sectors will likely experience increased relief to their profit margins in 2018, as interest rates are expected to rise at a moderate pace. In time, the reversal of a low interest rate environment will be beneficial for insurers. In addition to improved earnings, gradually rising interest rates will ease spread compression in spread-dependent businesses and enable insurers to more closely match their asset and liability cash flows to meet liquidity demands.

The Tax Cuts and Jobs Act of 2017 represents a substantial change to fiscal policy with changes throughout the Code.³³⁵ One of the more significant elements reduces the corporate federal

³³² When the Federal Reserve sets the discount rate and the target for the fed funds rate, the yields of market instruments are not directly influenced. Rather, market forces establish long-term rates and yields in response to expectations of future interest rates and the performance of the economy.

³³³ Full employment or the long-term natural rate of unemployment refers to the lowest rate of unemployment that an economy can sustain over the long run. It encompasses frictional and structural sources of unemployment. In the post-crisis period from July 2009 through July 2018, the long-term natural rate of unemployment ranged between 4.6 and 5.1 percent on a quarterly basis (in contrast to a low of 4.9 and as high as 5.2 in the comparable period pre-crisis). U.S. Congressional Budget Office, "Natural Rate of Unemployment (Long-Term) [NROU]," *Federal Reserve Bank of St. Louis*, September 16, 2018, <https://fred.stlouisfed.org/series/NROU>.

³³⁴ According to the U.S. Department of Labor's Bureau of Labor Statistics (BLS), wages and salaries increased 2.8 percent for the 12-month period ending June 2018 compared to a 2.3 percent increase for the 12-month period ending June 2017. BLS, "Employment Cost Index – June 2018," news release, July 31, 2018, <https://www.bls.gov/news.release/pdf/eci.pdf>.

³³⁵ See Individual Tax Reform and Alternative Minimum Tax, Pub. L. No. 115-97, 131 Stat. 2054 (2017). This discussion does not address several other important changes to the taxation of insurance companies, including: elimination of the special deduction for small life insurance companies; (2) changes to the insurance company

income tax rate considerably to align with tax rates worldwide. In addition to helping U.S. insurers and other businesses remain globally competitive, the change in the corporate federal income tax rate is aimed at encouraging businesses to make additional investments from tax savings, thereby stimulating the U.S. economy.

At least four specific changes in the tax law are expected to affect the insurance industry generally, although the effects on individual insurers will vary by company. First, the reduced corporate federal income tax rate facilitates repatriation of cash and profits from abroad; however, the tax base was also expanded under the new legislation to include the Base Erosion and Anti-Abuse Tax (BEAT), an excise tax that affects cross-border transfers within a group of companies.³³⁶ The BEAT requires corporations that have significant gross receipts³³⁷ to pay an additional amount of tax to the extent their liability computed on a modified taxable income base with a reduced tax rate exceeds their regular corporate tax liability. Modified taxable income is computed like normal taxable income but disallows deductions for certain “base erosion payments” to foreign related parties. Base erosion payments generally mean deductible payments by a U.S. corporation (or U.S. branch of a foreign corporation) to a foreign related party, but several other types of payments are included in the definition.³³⁸ In general, related-party interest, royalties, the gross amount of reinsurance premiums, any reinsurance recovered in respect of annuity and life insurance contracts, and all other types of corporate service fees paid to a foreign related party are all effectively taxed under the BEAT. As a result, the BEAT affects many cross border transactions between related parties.³³⁹ The BEAT tax rate is set at five percent in 2018, rises to 10 percent in 2019 and then to 12.5 percent in 2026.³⁴⁰ According to S&P Global, the U.S. life insurance industry ceded about \$60 billion in total premiums to offshore affiliates in 2016.³⁴¹ Lowering the corporate federal income tax rate while imposing the BEAT may cause insurers to re-evaluate the structure of their operations, with some choosing to

“proration” rules, designed to reduce the tax exclusion for tax-exempt interest income and to reduce the deduction for dividends received; (3) changes to the method by which companies calculate life insurance and annuity tax reserves, and to the method for taking a change in accounting for a life company’s reserves into account; (4) changes to the method for capitalizing policy acquisition expenses of life insurance products; and (5) modification of the unpaid loss discounting rules for property and casualty insurance companies.

³³⁶ Richard Rubin, “Companies Hope to Beat a New Tax Called the BEAT,” *The Wall Street Journal*, June 26, 2018. <https://www.wsj.com/articles/companies-hope-to-beat-a-new-tax-called-the-beat-1530005401>.

³³⁷ The BEAT only applies to large U.S. corporate taxpayers (other than S corporations, REITS and RICs) and foreign corporations with large taxable U.S. branches.

³³⁸ The definition also includes premiums and other consideration paid with respect to certain reinsurance payments as well as certain payments for the purchase of depreciable property. The BEAT only applies if a taxpayer’s base erosion payments exceed three percent of all deductible payments. This percentage is reduced to two percent for certain banks and registered securities dealers.

³³⁹ Rubin, “Companies Hope to Beat a New Tax Called the BEAT.”

³⁴⁰ Jason Woleben and Anup Parasuraman, “US Tax Reform May Prompt Life Underwriters to Alter Reinsurance Strategy,” *S&P Global Market Intelligence*, February, 13, 2018, <https://platform.mi.spglobal.com/web/client?auth=inherit#news/article?id=43401204>.

³⁴¹ Woleben and Parasuraman, “US Tax Reform May Prompt Life Underwriters to Alter Reinsurance Strategy.”

use less foreign affiliated reinsurance and incurring higher costs as a result.³⁴² Insurers will likely weigh the cost of retaining more risk, including the impact on their capital positions, against the cost of the new BEAT tax with respect to offshore reinsurance transactions.

Second, the reduced corporate federal income tax rate will impact insurers' RBC ratios, stemming from RBC factor adjustments and changes in the values of gross deferred tax assets and liabilities.³⁴³ The NAIC developed its RBC model as a tool for state regulators to identify weakly capitalized insurers by measuring capital adequacy relative to risk exposure. The impact of the recent tax reform measures will be particularly noticeable for life insurers whose RBC ratios are determined post-tax.³⁴⁴ Because RBC requirements are calculated on an after-tax basis for life insurers, a decrease in the corporate federal tax rate would involve an increase to post-tax RBC factors.³⁴⁵ However, the interaction of the new corporate federal tax rate with several of the factors in the RBC formula, including those related to bonds, real estate, and mortality risk, is expected to lower RBC ratios at year-end 2018 for life insurers largely due to the adjustments made to pre-tax RBC factors, which do not fully incorporate the new 21 percent corporate federal income tax rate.³⁴⁶ The lower expected RBC ratios, however, would not be indicative of a change in solvency position for most life insurers (i.e., the risk profile of an insurer at pre- and post-tax reform would remain unchanged). While the NAIC has implemented the changes to RBC to become effective for 2018 year-end reporting, it continues to assess the appropriateness of those revisions and to review other considerations.

Third, from the perspective of insurance products, the new tax legislation may affect the use of life insurance as an estate protection vehicle. In particular, the Tax Cuts and Jobs Act temporarily raises the gift and estate tax exemption amount through 2025. In April 2018, the U.S. Internal Revenue Service (IRS) announced that the exemption amount for 2018 would be \$11.2 million per person, rising from \$5.6 million in 2017.³⁴⁷ Adjusted for inflation, the gift and estate tax exemption is revised each year by the IRS. The increased exemption amount may

³⁴² See, e.g., Ezequiel Minaya and Nina Trentmann, "A Tax Change Threatens to Hit Insurers When Most Vulnerable", *The Wall Street Journal*, August 21, 2018. <https://www.wsj.com/articles/a-tax-change-threatens-to-hit-insurers-when-most-vulnerable-1534843801>.

³⁴³ The lower corporate federal income tax rate of 21 percent will reduce gross deferred tax assets (DTAs) and gross deferred tax liabilities (DTLs). DTAs and DTLs are measured using the tax rate expected to apply when the DTA/DTL is expected to be realized, reducing future federal income tax. Carryback provisions have also been affected by the new tax legislation. The ability to carry back net operating losses (NOLs) for life entities has been eliminated; non-life entities can continue to carry back NOLs two years.

³⁴⁴ While the RBC requirements are calculated on a post-tax basis for life insurers, they are calculated on a pre-tax basis for property and casualty insurers.

³⁴⁵ When a firm reports a loss, a lower corporate tax rate results in a larger post-tax net loss. Thus, post-tax RBC factors need to be adjusted upward.

³⁴⁶ Tim Zawacki, "Tax Reform to Weigh on Upcoming Annual US Statutory Insurance Statements," *S&P Global Market Intelligence*, February 28, 2018, <https://platform.mi.spglobal.com/web/client?auth=inherit#news/article?id=43580704>.

³⁴⁷ IRS, "Inflation Adjustments Under Recently Enacted Tax Law," IR-2018-94, April 13, 2018. <https://www.irs.gov/newsroom/inflation-adjustments-under-recently-enacted-tax-law>.

reduce the need for some individuals to own life insurance as part of an estate plan and, as a result, they may consider surrendering their policies or selling them on the secondary market. On the other hand, because the exemption increase is only temporary, many taxpayers may decide to keep their policies in effect.

Finally, the lower corporate federal income tax rate tends to make investing in municipal bonds less attractive. Of the nearly \$4 trillion in municipal bonds outstanding, U.S. chartered banks held over 14 percent or \$554.4 billion; property-casualty insurance companies owned close to 9 percent or \$327 billion; and life insurers held in excess of 5 percent or \$193.8 billion as of the end of the first quarter 2018.³⁴⁸ Insurers and other market players may to some extent pull back from the municipal bond market in the near term in favor of alternative taxable investments.³⁴⁹

Although interest rate increases are expected to take a firmer hold this year and the full impact of the new tax legislation will evolve over time, the financial outlook for the insurance industry in the near term remains sound, barring the occurrence(s) of any substantial natural or other catastrophes. Both the L&H and P&C insurance sectors reported stable surplus positions as of June 30, 2018, despite a weakening in profitability for the L&H sector in the first six months of the year relative to the comparable period in 2017. The P&C sector showed a considerable boost in earnings for the first half of 2018, largely attributable to an aggregate underwriting gain of more than twice the level for the same period a year ago. Finally, leverage ratios and liquidity indicators held steady for the first six months of 2018, on track to mirror those observed in 2017. Still other factors touching upon the broader economy – such as the implications of a rising U.S. dollar on global trade and expectations of a potential end to quantitative easing by the European Central Bank – may also influence insurer behavior in 2018.

³⁴⁸ Federal Reserve, *Financial Accounts of the United States: Flow of Funds, Balance Sheets, and Integrated Macroeconomic Accounts First Quarter 2018* (June 7, 2018), Tables L.100 through L.132. <https://www.federalreserve.gov/releases/z1/20180607/z1.pdf>.

³⁴⁹ However, the Tax Cuts and Jobs Act also increased the proration percentage for P&C companies and changed the proration formula for life companies. These changes are calculated to increase the percentage of state and municipal bond interest that is taxable to insurance companies. These changes, combined with the reduction in the corporate tax rate, can be expected to increase tax-exempt bond interest rates, which should mitigate the reduction in demand.